HUMAN DRUG TESTING BY THE CIA, 1977

HEARINGS

BEFORE THE

SUBCOMMITTEE ON HEALTH AND SCIENTIFIC RESEARCH

OF THE

COMMITTEE ON HUMAN RESOURCES UNITED STATES SENATE

NINETY-FIFTH CONGRESS

FIRST SESSION

ON

S. 1893

TO AMEND THE PUBLIC HEALTH SERVICE ACT TO ESTABLISH THE PRESIDENT'S COMMISSION FOR THE PROTECTION OF HUMAN SUBJECTS OF BIOMEDICAL AND BEHAVIORAL RESEARCH, AND FOR OTHER PURPOSES

SEPTEMBER 20 AND 21, 1977

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HUMAN DRUG TESTING BY THE CIA, 1977

TUESDAY, SEPTEMBER 20, 1977

U.S. SENATE,
SUBCOMMITTEE ON HEALTH AND SCIENTIFIC RESEARCH
OF THE COMMITTEE ON HUMAN RESOURCES,
Washington, D.C.

The subcommittee met, pursuant to notice, at 9:10 a.m., in room 318, Russell Senate Office Building, Senator Edward M. Kennedy (chairman of the subcommittee) presiding.

Present: Senators Kennedy and Schweiker.

OPENING STATEMENT OF SENATOR KENNEDY

Senator KENNEDY. We will come to order.

Today the Health and Scientific Research Subcommittee resumes its inquiry into the biologic and behavioral research activities of the Central Intelligence Agency and the Department of Defense. The events we will hear about over the next 2 days occurred between 1952 and 1972. They had their origin in a different time which had different values and realities. But it is important for us to fully understand these events today—because they raise fundamental questions about the kind of society we are and want to become.

We are a free people, living in an open society. But some of our most cherished freedoms have been threatened by these CIA activities.

The question is not whether a free society can accommodate the need for covert intelligence activities. The question is how those activities can be made accountable; how they can be carried out without jeopardizing the very freedoms they are supposed to protect.

In the United States, the ends never have, and never will, justify the means. Freedom can be eroded by internal excesses as well as by external threats. The story we will hear in these next 2 days is of well motivated, patriotic Americans who, by their work, eroded the freedom of individuals and of institutions in the name of National security.

As a result, individual Americans from all social levels, high and low, were made the unwitting subjects of drug tests; scores of universities were used to further CIA research objectives without their knowledge, thus threatening in a fundamental way their traditional independence and integrity; other Government agencies, such as the Bureau of Narcotics, the National Institutes of Health, and the Internal Revenue Service, were used to further the programs and mission of the Central Intelligence Agency.

These projects were not the creation of low-level agency bureaucrats working against the wishes or without the knowledge of the Agency's leadership. The collection of activities now known as

MK–ULTRA were approved, after personal review, including briefings by the Director of the Agency, Mr. Dulles.

It is well known that another CIA Director, Mr. Helms, approved the destruction of the MK–ULTRA records in 1972. This has made the task of reconstructing those events very difficult—both for the CIA and for interested Senate committees. What is clear now, from the witnesses we have heard and will hear, and from the few records that have been found, is the following:

1. When MK–ULTRA was phased out, it was replaced by MK–SEARCH. MK–SEARCH represented a continuation of a limited number of the ULTRA projects. It is now clear that the records of this project have also been destroyed. In fact, the records of all drug research projects available to the Director of the Technical Services Division of the CIA were destroyed at the same time.

2. Some operational activities utilizing the fruits of this research were carried out.

3. The bulk of the research effort led nowhere.

4. The Bureau of Narcotics was heavily involved in all the drug projects involving unwitting subjects.

5. The CIA had available certain documents pertaining to these activities in 1975, when this subcommittee's inquiry began, which they did not make available until 2 weeks ago; and that the Agency only discovered that some MK–SEARCH materials were available after the August 3 hearing.

It is my hope that these next 2 days of hearings will close the book on this chapter of the CIA's life. We have the opportunity to learn from what has happened. We have the opportunity to build in controls so these excesses will not occur again If we do not take the opportunity, if we return to business as usual, then the next erosions of our freedom and traditions may not be reversible.

Part of the obvious interest of the continuation of these 2 days of hearings is that we will see that many of the programs that were started in the early 1950's, many of them continued into the early part of the 1970's, and during this period of time we see the perversion of many different governmental agencies, and where we found at least some programs were started, looked like they had a limited life and then were really phased out, that the continuation of those activities continued on and on and on.

I think we are concerned about the perversion of those various agencies of Government. We are concerned most of all about what the impact of these activities have been on unwitting American subjects during this whole period of time. Even though we will hear about the series of different tests that took place, and we will track how those tests began, how they continued and, in some instances, how they were phased out, we will see a continuation, I think, of activities that will fail to really protect particularly the unwitting subjects that were involved in many of these programs, and that is a matter of obvious serious concern about the activities, particularly when they went on for such a profound and extensive period of time.

Of course, always we have to ask ourselves what was really gained from these kinds of programs, particularly in the health field, at a time when we see scarce resources and we see the expenditures of hundreds of thousands of dollars, millions of dollars really, in terms of health function, and we see virtually little if any kind of accounta-

bility in many of these areas. No one doubts that there are serious kinds of national security issues which are raised in the whole question of behavioral control. During the course of the hearing tomorrow, in inquiring of Mr. Turner, we are going to inquire also about what is essential in terms of providing some degree of protection for the security of the American people in this area of behavioral research.

[A copy of the bill dealing with the subject follows:]

95TH CONGRESS
1ST SESSION

S. 1893

IN THE SENATE OF THE UNITED STATES

JULY 19 (legislative day, MAY 18), 1977

Mr. KENNEDY (for himself, Mr. JAVITS, Mr. PELL, and Mr. SCHWEIKER) introduced the following bill; which was read twice and referred to the Committee on Human Resources

A BILL

To amend the Public Health Service Act to establish the President's Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "President's Commission for the Protection of Human Subjects of Biomedical and Behavioral Research Act of 1977".

AMENDMENT TO THE PUBLIC HEALTH SERVICE ACT

SEC. 2. The Public Health Service Act is amended by adding after title XVII the following new title:

"TITLE XVIII—PRESIDENT'S COMMISSION FOR THE PROTECTION OF HUMAN SUBJECTS OF BIOMEDICAL AND BEHAVIORAL RESEARCH

"ESTABLISHMENT OF COMMISSION

"SEC. 1801. (a) (1) There is established a Commission to be known as the President's Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (hereinafter in this part referred to as the 'Commission').

"(b) The Commission shall be composed of eleven members appointed by the President by and with the advice and consent of the Senate. The President shall appoint—

"(1) five (and not more than five) members of the Commission from individuals—

"(A) who are or have been engaged in biomedical or behavioral research involving human subjects, and

"(B) who are especially qualified to serve on the Commission by virtue of their training, experience, or background; and

"(2) six members of the Commission from individuals—

"(A) who are not and have never been engaged in biomedical or behavioral research involving human subjects, and

"(B) who are distinguished in the fields of medicine, law, ethics, theology, the biological, physical, behavioral and social sciences, philosophy, humanities, health administration, government, and public affairs.

"(c) No individual who is a full-time employee of the United States may be appointed as a member of the Commission.

"(d) Prior to the appointment of an individual as a member of the Commission under subsection (b), each such individual shall receive all agency and department security clearances necessary to assure such individual's access, as a member of the Commission, to information (as defined in section 1811).

"(e) Until such time as the President acts to appoint members of the Commission under subsection (b), those members of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, who are serving upon the date of enactment of the X Act, are deemed members of the Commission: *Provided*, That no classified information be made available to such members through a request of the Commission until appropriate security clearances be obtained by such members.

"(f) The term of office of each member of the Commission shall be four years; except that—

"(1) the terms of office of members first taking office shall begin on the date of appointment and shall expire, as designated by the President at the time of their appointment, four at the end of two years, four at the end of three years, and three at the end of four years;

"(2) the term of office of each member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed shall be appointed for the remainder of such term; and

"(3) a member whose term has expired may serve until his successor has been appointed.

"(g) (1) The members of the Commission shall elect a Chairman and one Vice Chairman from among themselves. Either the Chairman or Vice Chairman may be a scientist; however both shall not be scientists.

"(2) Seven members of the Commission shall constitute a quorum for business, but a lesser number may conduct hearings.

"(3) The Commission shall meet at the call of the Chairman or at the call of a majority of its members.

"(4) No individual may be appointed to serve as a member of the Commission, if such individual has served for two terms of four years each.

"(5) A vacancy on the Commission shall not affect the authority or activities of the Commission.

"(h) Members of the Commission shall receive compensation at a rate to be fixed by the Commisson, but not exceeding for any day (including traveltime) the daily equivalent of the effective rate for GS-18 of the General Schedule while engaged in the actual performance of the duties vested in the Commission, and shall be reimbursed for travel, subsistence, and other necessary expenses incurred in the performance of such duties.

"(i) The Secretary of Health, Education, and Welfare, the Secretary of Defense, the Director of Central Intelligence, the Director of the Office of Science and Technology Policy (established under the Presidential Science and Technology Advisory Organization Act of 1976), the Administrator of Veterans' Affairs, and the Director of the National Science Foundation shall each designate an individual to serve as a nonvoting, ex-officio adviser to the Commission.

"(j) The Commission may secure directly from any department or agency information necessary to enable it to carry out its duties. Upon the written request of the Chairman of the Commission, or eight members thereof, each department or agency shall furnish all information requested

by the Commission which is necessary to enable the Commission to carry out its duties.

"Duties and Functions of the Commission

"GENERAL

"SEC. 1802. (a) (1) (A) The Commission shall conduct a comprehensive investigation and study to identify the basic ethical principles which should underlie the conduct of biomedical and behavioral research involving human subjects.

"(B) In carrying out the provisions of subparagraph (A), the Commission shall consider at least the following:

"(i) The boundaries between biomedical or behavioral research involving human subjects and the accepted and routine practice of medicine;

"(ii) The role of assessment of risk-benefit criteria in the determination of the appropriateness of research involving human subjects;

"(iii) Appropriate guidelines for the selection of human subjects for participation in biomedical and behavioral research;

"(iv) Appropriate mechanisms to assure the full exercise of the rights and full protection of the interests of human subjects of biomedical and behavioral research;

"(v) The nature and definition of informed consent in various settings;

"(vi) The principles identified and developed by the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research; and

"(vii) All relevant work of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research.

"(2) The Commission shall develop comprehensive and uniform policies, procedures and guidelines which should be followed in biomedical and behavioral research involving human subjects to assure that it is conducted in accordance with principles identified by the Commission under subsection (a) (1) (A) and concerning any other matter pertaining to the full exercise of the rights and full protection of the interests of human subjects of such research.

"(3) The Commission shall advise, consult with, and make recommendations to any department or agency concerning such administrative or other action as may be appropriate or necessary to apply the policies, procedures and guidelines developed under paragraph (2) to biomedical and behavioral research conducted, funded or regulated under programs administered by such departments or agencies, and concerning any other matter pertaining to the full exer-

cise of the rights and full protection of the interests of human subjects of biomedical and behavioral research.

"(4) The Commission shall, from time to time, monitor the implementation of those policies, procedures and guidelines recommended by the Commission under paragraph (3).

"(b) (1) The Commission shall investigate and study biomedical and behavioral research conducted, supported or regulated under programs administered by any department or agency and involving children, prisoners, military personnel, and the institutionalized mentally infirm to determine—

"(A) The nature of the consent obtained from such persons or their legal representatives before such persons were involved in such research;

"(B) The adequacy of the information given them respecting the nature and purpose of the research, procedures to be used, risks and discomforts, anticipated benefits from the research, and other matters necessary for informed consent; and

"(C) The competence and the freedom of the persons to make a choice for or against involvement in such research.

"(2) The Commission shall advise, consult with, and make recommendations to any department or agency to establish special requirements if any for informed consent for participation in biomedical and behavioral research in-

volving children, prisoners, military personnel and the institutionalized mentally infirm.

"(3) The Commission shall advise, consult with, and make recommendations to any department or agency concerning such administrative or other action as may be appropriate or necessary to assure that biomedical and behavioral research conducted, funded, or regulated under programs administered by such department or agency meet the special requirements for informed consent, if any, identified by the Commission under paragraph (2).

"(c) (1) The Commission shall conduct an investigation and study of the scope, nature and extent of personal injuries to and deaths of individuals which were proximately caused by participation in or the acts of others involved in biomedical and behavioral research programs. Such study shall include recommendations for a method of compensation for such injuries and deaths.

"(2) Upon completion of the study, the Commission shall simultaneously submit copies of a report on such study to the appropriate departments or agencies and to the appropriate committees of Congress.

"(d) (1) (A) The Commission shall develop comprehensive and uniform policies, procedures, and guidelines consistent with this part which should be followed by each department or agency in establishing, implementing, certify-

ing, and monitoring human investigation review boards in those entities which receive funds from or which are regulated by each such department or agency.

"(B) In carrying out the provisions of subparagraph (A), the Commission shall include among other matters, comprehensive and uniform policies, procedures, and guidelines concerning—

"(i) the establishment, operation, and functions of the Protocol Review Subcommittee and the Subject Advisory Subcommittee required under subsection (c) of section 1805;

"(ii) the nature and extent of public participation in the decisionmaking process of the human investigation review boards and subcommittees;

"(iii) the inclusion of the public in meetings of such boards and subcommittees;

"(iv) The requirement for public hearings by such boards and subcommittees; and

"(v) The requirement of public disclosure of decisions of such boards and subcommittees and the nature and scope of such disclosure.

"(2) Once a department or agency has required the establishment of human investigation review boards in those entities which receive funds from or which are regulated by such department or agency, the Commission shall, from

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time to time, monitor such department's or agency's policies, procedures, guidelines, and other administrative actions.

"(e) The Commission shall continually review the ethical, social, and legal implications of all biomedical and behavioral research involving human subjects conducted, funded, or regulated by any department or agency, and shall make appropriate recommendations to any such department or agency, for the protection of human subjects of such research.

"(f) (1) The Commission shall compile a complete list and record of decisions of human investigation review boards and shall annually publish reports of important decisions and distribute such reports to the public.

"(2) The Commission shall insure communication among human investigation review boards as it determines necessary to permit such boards to be informed about the activities, standards, and decisions of such boards.

"SPECIAL STUDY

"SEC. 1803. (a) The Commission shall undertake a comprehensive study of the ethical, social, and lagel implications of advances in biomedical and behavioral research technology. Such study shall include—

"(1) an analysis and evaluation of scientific and technological advances in past, present, and projected biomedical and behavioral research and services;

"(2) an analysis and evaluation of the implications of such advances, both for individuals and for society;

"(3) an analysis and evaluation of laws and moral and ethical principles governing the use of technology in medical practice;

"(4) an analysis and evaluation of public understanding of and attitudes toward such implications and laws and principles; and

"(5) an analysis and evaluation of implications for public policy of such findings as are made by the Commission with respect to advances in biomedical and behavioral research and technology and public attitudes toward such advances.

"(b) (1) The Commission shall simultaneously submit copies of a report on such study to the appropriate departments or agencies and to the appropriate committees of Congress.

"(2) The Commission may, if it deems it appropriate, include in such report recommendations to such departments or agencies and to Congress.

"DELIVERY OF HEALTH SERVICES

"SEC. 1804. (a) (1) The Commission shall identify the basic ethical principles which should underlie the delivery of health services to persons.

"(2) In carrying out the provisions of paragraph (1), the Commission shall—

"(A) study those basic ethical principles identified in subsection (a) (1) (A) of section 1802 for the purpose of determining their application to the delivery of health services to persons;

"(B) conduct a comprehensive investigation and study to identify those basic ethical principles which—

"(i) should underline the delivery of health services to persons; and

"(ii) were either not identified under subsection (a) (1) (A) of section 1802 or if identified under such subsection were determined by the Commission to be inapplicable to the delivery of health services to persons.

"(b) The Commission shall develop comprehensive and uniform policies, procedures, and guidelines which should be followed in the delivery of health services to persons to assure that such services are performed in accordance with principles identified by the Commission under subsection (a) and concerning any other matter pertaining to the full exercise of the rights and full protection of the interests of persons receiving health services.

"(c) The Commission shall advise, consult with, and

make recommendations to any department or agency the Commission deems appropriate concerning such administrative or other action as may be appropriate or necessary to apply the policies, procedures, and guidelines developed under subsection (b) to the delivery of health services to persons and concerning any other matter pertaining to the full exercise of the rights and full protection of the interests of such persons.

"(d) The Commission shall, from time to time, monitor the implementation of those policies, procedures and guidelines recommended by the Commission under subsection (c) and adopted by departments or agencies.

"Human Investigation Review Boards

"ESTABLISHMENT AND OPERATION

"SEC. 1805. (a) Each department or agency shall, in consultation with the Commission—

"(1) develop policies, procedures and guidelines for the establishment and operation of human investigation review boards in entities which receive funds from or which are regulated by such department or agency.

"(2) require the establishment and operation of a human investigation review board by each such entity;

"(3) take such administrative or other action as may be necessary or appropriate to require the estab-

lishment and effective operation of a human investigation review board by each such entity.

"(b) (1) The members of each human investigation review board shall be appointed by the chief executive officer of the entity in accordance with policies, procedures, guidelines, and regulations established by a department or agency.

"(2) No member of a human investigation review board shall be involved in either the initial or continuing review of an activity in which he has a conflict of interest as defined by the Commission, except to provide such information as may be requested by such human investigation review boards.

"(c) Each human investigation review board shall establish two subcommittees as follows:

"(1) a Protocol Review Subcommittee, which shall be responsible for approving, diasapproving, or offering suggestions and modifications of protocols for experimental procedures;

"(2) a Subject Advisory Subcommittee, which shall be primarily concerned with the protection of the rights and interests of subjects of biomedical and behavioral research, and shall assure that human subjects are as well informed about the nature of the research as is reasonably possible.

"(d) Notwithstanding any other provision of law, no entity shall be required to establish more than one human investigation review board.

"(e) In a case where the policies, procedures, or guidelines of more than one department or agency conflict and a human investigation review board or an entity cannot resolve the application of such conflicting policies, procedures or guidelines, the Commission shall decide the resolution of such conflict.

"CERTIFICATION

"SEC. 1806. (a) Each department or agency which funds or regulates an entity with respect to biomedical and behavioral research involving human subjects shall certify that the Human Investigation Review Board of such entity is in conformity with the requirements of subsection B.

"(b) No human investigation review board shall be certified by a department or agency unless such department or agency is satisfied that—

"(1) the entity has established a human investigation review board in such manner as is required by this title and by such department or agency;

"(2) the human investigation review board will operate in a manner so as to assure the full exercise of the rights and full protection of the interests of subjects

of biomedical and behavioral research consistent with the ethical and moral principles identified by the Commission, pursuant to section 1801.

"DUTIES OF THE HUMAN INVESTIGATION REVIEW BOARDS

"SEC. 1807. It shall be the duty of each human investigation review board, established under section 1805, to—

"(a) establish policies for the review of research sponsored in whole or part by Federal funds or required by Federal regulation, consistent with the policies, procedures, and guidelines of appropriate departments or agencies;

"(b) assume full responsibility to insure that biomedical and behavioral research involving human subjects is carried out under the safest possible conditions and with the fully informed consent of the subject (or his family) in a manner fully consistent with the policies, procedures, and guidelines of appropriate departments or agencies;

"(c) seek the consultative services of the Commission on any decision, or for the provision of information needed to arrive at a decision; and

"(d) initiate, if appropriate, the referral of particular decisions to the Commission in accordance with regulations promulgated by the Commission.

"MONITORING AND INSPECTION

"SEC. 1808. (a) A department or agency which has certified the Human Investigation Review Board of an entity shall, from time to time, monitor the operation and activities of—

"(1) such Board, and

"(2) such entity,

to determine whether the operation and activities of such Board and entity are in compliance with this title, and the policies, procedures, guidelines, and regulations of such department or agency.

"(b) (1) A department or agency which has certified the human investigation review board of an entity shall, from time to time, inspect such entity to determine whether it is in compliance with this title, and the policies, procedures, guidelines, and regulations of such department or agency.

"(2) In the case of an entity inspected pursuant to this section, the inspection shall extend to all tangible things therein, including records, files, papers, documents, processes, controls, and facilities, which such department or agency finds relevant or material to whether such entity is in compliance with this title, and the policies, procedures, guidelines, and regulations of such department or agency.

"(c) The monitoring and inspection authority of any

department or agency, pursuant to this section, shall be limited to those operations, activities, and tangible things which relate to research funded, in whole or in part, by or required pursuant to a regulation of such department or agency.

"CONFIDENTIALITY AND RECORDKEEPING REQUIREMENTS

SEC. 1809. If an entity has established a human investigation review board and such board has been certified by a department or agency, such entity shall—

"(a) establish and maintain such records, make such reports, and provide such information as any such department or agency shall by regulation or order require to determine whether such entity is in compliance with this title, and the policies, procedures, guidelines, and regulations of such department or agency;

"(b) make such records, files, papers, documents, processes, and controls which such department or agency finds material or relevant to whether such entity is in compliance with this title, and the policies, procedures, guidelines, and regulations of such department or agency available to such department or agency, or any of its duly authorized representatives for examination, copying, or mechanical reproduction on or off the premises of such entity upon the reasonable request therefor;

"(c) (1) a department or agency shall not disclose

any information reported to or otherwise obtained by it pursuant to this title which concerns any information which contains or relates to a trade secret or other matter referred to in section 1905 of title 18 of the United States Code;

"(2) the Commission, each department or agency and each entity which is required to establish and maintain records, make reports, and provide information pursuant to this title shall in securing and maintaining any record of individually identifiable personal data (hereinafter in this subsection referred to as 'personal data') for purposes of this title—

"(A) inform any individual who is asked to supply personal data whether he is legally required, or may refuse, to supply such data and inform him of any specific consequences, known to the Commission, department or agency, or entity, as the case may be, of providing or not providing such data;

"(B) upon request, inform any individual if he is the subject of personal data secured or maintained by the Commission, department or agency, or entity, as the case may be, and make the data available to him in a form comprehensive to him;

"(C) assure that no use is made of personal data which is not within the purposes of this title

unless an informed consent has been obtained from the individual who is the subject of such data;

"(D) upon request, inform any individual of the use being made of personal data respecting such individual and of the identity of the individuals and entities which will use the data and their relationship to the Commission, department or agency, or entity;

"(3) any entity which maintains a record of personal data and which receives a request from the Commission or a department or agency for such data for purposes of this title shall not transfer any such data to the Commission or a department or agency unless the individual whose personal data is to be so transferred gives an informed consent for such transfer.

"(4) Notwithstanding any other provision of law, personal data collected or maintained by the Commission or a department or agency, pursuant to this title, may not be made available or disclosed by the Commission or a department or agency to any person or entity other than the individual who is the subject of such data. Such personal data may not be required to be disclosed by any Federal, State, or local civil, criminal, administrative, legislative or other proceeding.

"(d) Any person who unlawfully discloses the contents

of any record, file, paper, document, process, or control shall upon conviction be fined not more than $500 in the case of a first offense, and not more than $5,000 in the case of each subsequent offense.

"(e) The recordkeeping requirements established by any department or agency shall be limited to those operations and activities which relate to research funded by or required pursuant to a regulation of such department or agency.

"INTERIM PROVISIONS

"SEC. 1810. (a) Until such time as a human investigation review board has been certified by a department or agency, each department or agency shall determine with respect to biomedical and behavioral research conducted, supported, or required by regulation under programs administered by each such department or agency that—

"(1) the rights of human subjects of such research are fully exercised;

"(2) the interests of human subjects of such research are fully protected;

"(3) the risks to a human subject of such research are outweighed by the potential benefits to him or by the importance of the knowledge to be gained from such research;

"(4) informed consent is given by each human subject in accordance with the provisions of this section.

"(b) For purposes of this section only, the term 'informed consent' shall mean the consent of a person, or his legal representative, so situated as to be able to exercise free power of choice without the intervention of any element of force, fraud, deceit, duress, or other form of constraint or coercion. Such consent shall be evidenced by an individualized written document signed by such person, or his legal representative. The information to be given to the subject and recorded in such written document shall include the following basic elements:

"(1) a fair explanation of the procedures to be followed, including an identification of any which are experimental;

"(2) a description of any attendant discomforts and risks reasonably to be expected;

"(3) a fair explanation of the likely results should the experimental procedure fail;

"(4) a description of any benefits reasonably to be expected;

"(5) a disclosure of any appropriate alternative procedures that might be advantageous for the subject;

"(6) an offer to answer any inquiries concerning the procedures; and

"(7) any other matter which a department or agency deems appropriate for the full exercise of the

rights and full protection of the interests of human subjects of biomedical and behavioral research.

In addition, the written document executed by such person, or his legal representative, shall include no exculpatory language through which the subject is made to waive, or to appear to waive, any of his legal rights, or to release the institution or its agents from liability for negligence. Any organization which initiates, directs, or engages in programs of research, development, or demonstration which require informed consent shall keep a permanent record of such consent and the information provided the subject and develop appropriate documentation and reporting procedures as an essential administrative function.

"ADMINISTRATIVE PROVISIONS

"SEC. 1811. (a) The Commission may for the purpose of carrying out its duties hold such hearings, sit and act at such times and places, take such testimony, and receive such evidence as the Commission deems advisable.

"(b) (1) The Commission may appoint and compensate, at a rate not to exceed the annual rate of basic pay in effect for grade GS-18 of the General Schedule, an executive director, without regard to the provisions of title 5, United States Code, governing appointments in the competitive service, and the provisions of chapter 51 and subchapter

III of chapter 53 of such title, relating to classification and General Schedule pay rates, who shall administer full-time the daily activities of the Commission.

"(2) The Commission may appoint and fix the compensation of such personnel as it deems advisable, without regard to the provisions of title 5, United States Code, governing appointments in the competitive service, and the provisions of chapter 51 and subchapter III of chapter 53 of such title, relating to classification and General Schedule pay rates.

"(3) The Commission may procure, in accordance with the provisions of section 3109 of title 5, United States Code, the temporary or intermittent services of experts or consultants. Persons so employed shall receive compensation at a rate to be fixed by the Commission, but not exceeding for any day (including traveltime) the daily equivalent of the effective rate for grade GS–18 of the General Schedule. While away from his home or regular place of business in the performance of services for the Commission, any such person may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5703(b) of title 5, United States Code, for persons in the Government service employed intermittently.

"(c)(1) Except as provided in paragraph (2), the Commission may publish and disseminate to the public such

reports, information, recommendations, and other material relating to its functions, activities, and studies as it deems appropriate.

"(2) The Commission shall not disclose any information reported to or otherwise obtained by it in carrying out its functions which (1) identifies any individual who has been the subject of an activity studied or investigated by the Commission, (2) concerns any information which contains or relates to a trade secret or other matter referred to in section 1905 of title 18, United States Code, or (3) is properly classified for any purpose by a Federal agency.

"(d) Within sixty days of the receipt of any recommendation made by the Commission under this part, the appropriate department or agency shall publish it in the Federal Register and provide opportunity for interested persons to submit written data, views, and arguments with respect to such recommendation. The appropriate department or agency shall (1) determine whether the administrative or other action proposed by such recommendation is appropriate to assure the protection of human subjects of biomedical and behavioral research conducted, supported, or required by regulation under programs administered by it, and (2) if it determines that such action is not so appropriate, publish in the Federal Register such determination together with an adequate statement of the reasons for its

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determination. If the appropriate department or agency determines that administrative action recommended by the Commission should be undertaken by it, it shall undertake such action as expeditiously as is feasible.

"(e) The Commission may make grants and enter into contracts for the purpose of undertaking any required investigation or study, for the development of required policies, procedures and guidelines and for monitoring compliance with this title and policies, procedures, guidelines and regulations of a department or agency.

"(f) The Commission shall determine the priority and order of those duties and functions required to be performed under this title.

"(g) (1) Upon a determination by the Commission that sufficient information already exists concerning an area of investigation and study required to be conducted under this title, the Commission may decide that such investigation and study need not be conducted. In such a case, the Commission shall utilize already existing information as the basis for identifying those principles and developing those policies, procedures and guidelines required under this title.

"(2) Unless the Commission has determined that an investigation and study required under this title need not be conducted pursuant to paragraph (1), each investigation

and study shall be completed within three years from the date of enactment of the President's Commission for the Protection of Human Subjects of Biomedical and Behavioral Research Act of 1977.

"(h) (1) Pursuant to any activity relating to its duties and functions under this title, the Commission may subpena witnesses, compel the attendance and testimony of witnesses, and require the production of any records and information, including records, files, papers, documents, processes and controls and other tangible things, which the Commission finds relevant or material to its duties and functions. The attendance of witnesses and the production of records may be required from any place in any State or in any territory or other place subject to the jurisdiction of the United States at any designated place of hearing; except that a witness shall not be required to appear at any hearing any more than 500 miles distant from the place where he was served with a subpena. Witnesses summoned under this section shall be paid the same fees and mileage that are paid witnesses in the courts of the United States.

"(2) A subpena issued under this section may be served by any person designated in the subpena to serve it. Service upon a natural person may be made by personal delivery of the subpena to him. Service may be made upon a domestic or foreign corporation or upon a partnership or other unin-

corporated association which is subject to suit under a common name, by delivering the subpena to an officer, to a managing or general agent, or to any other agent authorized by appointment or by law to receive service of process. The affidavit of the person serving the subpena entered on a true copy thereof by the person serving it shall be proof of service.

"(3) In the case of contumacy by or refusal to obey a subpena issued to any person, the Commission may invoke the aid of any court of the United States within the jurisdiction of which the activity is carried on or of which the subpenaed person is an inhabitant, or in which he carries on business or may be found, to compel compliance with the subpena. The court may issue an order requiring the subpenaed person to appear before the Commission to produce records, if so ordered, or to give testimony touching the matter under consideration. Any failure to obey the order of the court may be punished by the court as a contempt thereof. All process in any such case may be served in any judicial district in which such person may be found.

"(i) On November 1 of each year, each department or agency shall each submit a report simultaneously to the President and to the appropriate committees of Congress. Each such report shall include with respect to the previous fiscal year—

"(1) a complete list and description of all recommendations made to such department or agency by the Commission;

"(2) a description of what action such department or agency took with respect to each such recommendation;

"(3) in those situations where such department or agency accepted a recommendation, a description of the policies, procedures, guidelines, regulations, and other administrative actions were taken by such department or agency to implement such recommendation;

"(4) In those situations where such department or agency failed to accept, in whole or in part, a recommendation, a description of the reasons for such failure; a description of policies, procedures, guidelines, regulations, and other administrative actions were followed in lieu of such recommendation; and what were the results.

"(j) Section 14 of the Federal Advisory Committee Act shall not apply with respect to the Commission.

"PENALTIES

"SEC. 1812. (a) No entity may receive any Federal funds from a department or agency, for the conduct of biomedical or behavioral research unless such entity has es-

tablished a human investigation review board which has been certified by such department or agency.

"(b) No entity may receive a Federal approval by a department or agency of a program, patent, product or study which requires the conduct of biomedical or behavioral research unless such entity has established a human investigation review board which has been certified by such department or agency.

"DEFINITIONS

"SEC. 1813. (a) As used in this title the term—

"(1) 'Commission' means the President's Commission for the Protection of Human Subjects of Biomedical and Behavioral Research.

"(2) 'President' means the President of the United States.

"(3) 'Department or Agency' means each authority of the Government of the United States, whether or not it is within or subject to review by another agency, but does not include—

"(A) the Congress;

"(B) the courts of the United States;

"(C) the governments of the territories or possessions of the United States; and

"(D) the government of the District of Columbia.

"(4) 'entity' includes an individual, partnership, corporation, association, or public or private organization but does not include a department or agency which conducts biomedical or behavioral research solely through grants or contracts.

"(5) 'information' includes any information which is classified or deemed to be classified for any purpose (including national security) by an agency or department.

"(6) 'health services' means those health services which are supported or financed by Federal funds.

"(7) 'regulated' and 'required pursuant to a regulation' means any biomedical or behavioral research involving human subjects which is required to be conducted pursuant to a regulation of a department or agency as a condition precedent to an approval by such department or agency of a program, patent, substance, product, or study.

"(b) As used in subsection (b) of section 1802 the term—

"(1) 'children' means individuals who have not attained the legal age of consent to participate in research as determined under the applicable law of the jurisdiction in which the research is to be conducted.

"(2) 'prisoners' means individuals involuntarily

confined in correctional institutions or facilities as defined in section 601 of the Omnibus Crime Control and Safe Streets Act of 1968 (43 U.S.C. 3781).

"(3) 'institutionalized mentally infirm' includes individuals who are mentally ill, mentally retarded, emotionally disturbed, psychotic, or senile, or who have other impairments of a similar nature and who reside as patients in an institution.

"(4) the term 'military personnel' means individuals who are active and inactive members of the United States Armed Forces and employees and agents of the Central Intelligence Agency.".

MISCELLANEOUS

SEC. 3. (a) Part A of title II of the National Research Act (42 U.S.C. 2891) is repealed.

(b) Sections 211 and 213 of the National Research Act are repealed.

(c) Subsections (f) of section 217 of the Public Health Service Act (42 U.S.C. 218(f)) is repealed.

EFFECTIVE DATE

SEC. 4. This Act and the amendments made by this Act shall take effect on October 1, 1977, except that the provisions of section 1812 shall not take effect until April 1, 1978.

Senator KENNEDY. But it seems to me, and I think the other members of the committee, that we have to protect our national interests, but we also have to protect the interest of our American citizens in a very important way, and develop the kinds of process where those protections can be made in ways that are not going to see the basic and fundamental integrity of our universities, other agencies and individuals compromised.

What we have seen over the issue of behavioral health research, which is the area of interest of this committee, during this period of time is that the agency worked effectively without accountability and, in so many instances, really basically without basic regard for the protection of the human subjects.

Senator Schweiker.

Senator SCHWEIKER. Thank you, Mr. Chairman.

Having served on the original Senate Intelligence Committee, I find it rather disturbing to be here at all today. During the Intelligence Committee's 18 months of investigation, we were continually given information by the intelligence agencies with the very specific implication that the information was either complete or it was the best we knew. We were told that we had the whole story then, just as this subcommittee was told we had the whole story during our 1975 hearings. Time after time after time, that has proven not to be the case.

The series of hearings we are now conducting began because we found yet another black box that we opened up to find information that throws just a little bit more light on the whole picture. It is rather tragic to me that Senate committees have to operate this way. We are limited by our knowledge and in our ability to make new laws and to oversee present laws when we are given information piecemeal—and seemingly with great reluctance by the agencies. It's like opening a series of small boxes, and then finding that after we open the last box, which we are assured has everything in it, there appears yet another box that has to be opened and the whole matter examined again.

That's certainly the description I would give of the way that the intelligence agencies have disclosed material on their past actions to Senate committees which are charged with legislative and oversight responsibilities.

I do commend Admiral Turner for his candor, for his straightforwardness in revealing the discovery of this latest group of documents containing more information relating to CIA human experimentation.

I do have to say I wonder who was responsible for supplying the information to us in the past and where this material was at the time our committee initially looked into the use of human subjects by the CIA. We were told 2 years ago that we had all of the information that was available, and that it was the most the officials knew. Of course the people who knew differently were either silent or not available.

So I am very troubled that this process goes on and on.

Also, while this point is not particularly relevant to this morning's hearing, in reading the newspapers this week we see the same sort of situation in the matter of the intelligence community's use of journalists. We see almost an exact parallel of the pattern of information disclosure on that issue as the subcommittee faces on the human subjects issue—being told something, but not being told the whole

story, and then finding out later that, in fact, we were told just a small part of the story, and now a new story has come out with a lot more detail and much broader implications than what we were originally told.

So it is not surprising to me that we are here today, but it is rather disappointing.

I am here to learn, and I have learned enough by now about how these things operate to know that there may well be more chapters in this continuing story.

Thank you, Mr. Chairman.

Senator KENNEDY. The final point I want to make, I suppose the matter which is of greatest concern for Americans, is that we have seen over the period of these 14 years when these programs were being undertaken a perversion again of the freedom of both individuals as well as agencies, and I suppose it is only fair to ask what was really achieved and what was accomplished from that?

I think that that certainly has been my conclusion reviewing both the details of the material and the documents. I think we would be hard pressed to find it.

Senator SCHWEIKER. Mr. Chairman, I do have a request. Senator Goldwater, who is ranking Republican member of the Senate Intelligence Committee, cannot be here because of the scheduling conflict. He has asked me to include a statement of his in the record at the start of these proceedings.

Senator KENNEDY. We will include that in the record as though read.

STATEMENT OF HON. BARRY M. GOLDWATER, A U.S. SENATOR FROM THE STATE OF ARIZONA

Senator GOLDWATER. Mr. Chairman: Information on drug testing of human beings by the CIA and other intelligence agencies became known to the public during the Rockefeller Commission and Church committee investigations. These events happened over 12 and as far back as 25 years ago and are now completely stopped. Yet, we continue to hear and read about these events in a manner that causes enough confusion and which lead some people to believe that these events are being revealed for the first time when in fact that is not the case. The current emphasis is a rehash of previous revelations and really adds nothing worthwhile except to cause a new rash of publicity and more confusion. None of the things that you are bringing up before this committee and transmitting on television across this country and spreading across the pages of the press of this country is new or, in fact, even news. We went through this, I guess, 2 years ago before the first Senate Select Committee on Intelligence and everything that you are hearing has been heard before.

Now as to why the orders were issued, you may recall that during the Korean conflict, for the first time, American prisoners were subjected to the use of drugs by the enemy in an effort to either make them talk or to punish them or to use them as propaganda agents. This business got started at a time when it was considered to be essential. I can recall how bewildered a lot of us were just following the Korean war when many of our soldiers who had been prisoners of war did not want to return home and it led us to believe that they had

been brainwashed. The Church committee's report explains it this way:

> The late 1940's and early 1950's were marked by concern over the threat posed by the activities of the Soviet Union, the People's Republic of China and other Communist bloc countries. United States concern over the use of chemical and biological agents by these powers was acute. The belief that hostile powers had used chemical and biological agents in interrogations, brainwashing, and in attacks designed to harass, disable, or kill Allied personnel created considerable pressure for a "defensive" program to investigate chemical and biological agents so that the intelligence community could understand the mechanisms by which these substances worked and how their effects could be defeated.

The Church committee report further explains that the rationale for testing programs was a follows:

> Fears that countries hostile to the United States would use chemical and biological agents against Americans or America's allies led to the development of a defensive program designed to discover techniques for American intelligence agencies to detect and counteract chemical and biological agents.

I think it was a very natural reaction of our leaders, in this particular instance, to run tests to find out what the effect of drugs, or at least certain drugs, would be on individuals so that we might provide protection for our own forces in the future. Certainly there were some unfortunate results, particularly in regard to the unwitting participants and even to those who volunteered for the program. But, war itself is an unfortunate thing.

That's behind us now. After 1½ years of investigation by the Church committee and now followed by more than a year of oversight by the new Senate Intelligence Committee we are now assured that the intelligence agencies are under congressional control with effective oversight and accountability. To arrive at that point the select committee has set up six subcommittees whose combined responsibilities involve them in all aspects of the intelligence gathering activities of the Federal Government. Each executive branch organization engaged in intelligence operations, all the way from the White House on down, must ask for funds, justify the programs for which those funds are requested, advise the committee of special undertakings, and, above all, account for what they do.

The intelligence business has been through some tough times and the public's view has been soured. That is behind us now. I believe it is time to look ahead. I am convinced that our agencies are staffed by competent and concerned public servants who will continue to provide the Nation with an effective intelligence program dedicated to the national interest. I believe they have earned and now deserve our support.

In my humble opinion, I think the time has come for someone to rise to the defense of the Central Intelligence Agency in this whole matter of the administration of certain types of drugs to individuals in this country, either on a voluntary or an involuntary basis. Now these individuals that you are bringing before this committee were members of the Intelligence Agency, and they were acting under orders. These are good, patriotic, dedicated American citizens who were told to do something and, in turn, those people who issued the instructions were given orders from on high, and if you want to trace the source right on up, you'll probably find that the source was probably at the White House level. People working in agencies like the CIA are pretty much like the people in uniform. They do not disobey

orders unless they feel so strongly about the subject that they would be willing to resign their posts or their commissions.

I would hope that the hearings before this committee would cease and that all the good work being done in rehabilitating and rebuilding the Central Intelligence Agency will not be hindered by spreading these matters, which will leave an erroneous impression, across the news of this country. I believe that it would be more useful at this time to focus our attention on finding and helping those individuals or institutions that may have been harmed by any improper or illegal activities.

I offer this with all respect to you, Mr. Chairman, and to your committee and with the full knowledge that you have every right in the world to hold these hearings.

Senator KENNEDY. We had joint hearings previously and we have worked very closely with the Intelligence Committee.

Our interest in these hearings is obviously limited to health aspects and this spins over, obviously, into other provisions.

Our first witness this morning is Dr. Charles Geschickter, Geschickter Fund for Medical Research.

Dr. Geschickter, we welcome you here. If you will be kind enough to come up, we will ask you to stand and be sworn in.

Do you swear that the testimony you will give is the truth, the whole truth, so help you, God?

Dr. GESCHICKTER. I do.

Senator KENNEDY. Just before we get started, one of the obvious aspects of our inquiry has been how the Agency in the development of this program of testing involved other agencies. We are going to hear from Mr. Bensinger tomorrow about the Bureau of Narcotics. I have here just a sworn statement by John Bartels, and I will just read it into the record.

It is a brief statement, but it is related to our first witness, and I think we ought to have this in the record, and I will insert it into the record at this time.

[The material referred to follows:]

STATE OF NEW YORK)
: ss.:
COUNTY OF WESTCHESTER)

JOHN R. BARTELS, JR., being a member of the Bar of the State of New York, affirms under penalty of perjury the following:

1. On July 1, 1973, I was appointed Acting Administrator of the U.S. Drug Enforcement Administration by Attorney General Elliot Richardson. During the first few weeks of that term, I learned from Patrick Fuller, Chief Inspector, that there were between 13 and 17 agents of D.E.A. assigned to various field offices as anonymous inspectors. These men had prior C.I.A. training, and I believe some may have had prior C.I.A. experience. Mr. Fuller explained that he had promised to keep their names anonymous, and accordingly could not tell even me who they were. Their function was to report to him alone anonymously, questionable instances or allegations concerning the character or integrity of other agents. Thus an agent could be transferred or removed from his position on Fuller's say-so alone without ever being confronted with a charge.

2. After consulting with Jonathan Moore, Mr. Richardson's executive assistant, I decided to encourage Mr. Fuller to retire or resign. He continued to refuse to disclose the names, but agreed that the program be disbanded, and it was. During this time period I received a letter

from William Colby, head of the C.I.A., withdrawing all support for this program.

3. Many months later I learned from my executive assistant, Daniel Casey, that the old Federal Bureau of Narcotics had maintained joint "safe houses" with the C.I.A. He told me that the Bureau had used these apartments in California for debriefing informants while he supposed the Agency had used them for meeting sources and perhaps compromising situations as they contained two-way mirrors. It is my belief that whatever Mr. Casey learned was from other agents or reports.

4. At about the same time I asked Mr. Colby for a representation from the C.I.A. that there were no employees on the D.E.A. payroll who were also performing services in any manner for the Agency. It is my recollection that I received an oral representation to that effect from Mr. Colby, and I believe a written letter, either from him or one of his deputies. In addition, the Office of Personnel informed me that there were approximately 53 employees at D.E.A. with past C.I.A. experience who had been absorbed into the Agency in the merger between B.N.D.D. and the Bureau of Customs. We obtained affidavits from each one of those employees to the effect that he was not performing any services for, or acting at the request of, any employee of the Agency. I believe we got affidavits from every employee with any past history of working with the Agency.

5. To my knowledge, there was no formal program of cooperation between D.E.A. and the C.I.A. after July of 1973 apart from the formal exchange of information between our office of intelligence and liaison for the Agency, initially Seymour Bolton and subsequently John Kennedy.

JOHN R. BARTELS, JR.

Sworn to before me this
19th day of September 1977.

Notary Public

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Senator KENNEDY. We will refer back to that during the course of our hearing.

Dr. Geschickter, would you tell us a little bit about the Geschickter Fund for Medical Research?

Did you arrange with the CIA to have the CIA money funneled through the funds for medical research in order to carry out various research projects?

STATEMENT OF CHARLES F. GESCHICKTER, SR., M.D., GESCHICKTER FUND FOR MEDICAL RESEARCH, PROFESSOR EMERITUS OF RESEARCH PATHOLOGY, GEORGETOWN UNIVERSITY MEDICAL CENTER, COMMANDER, U.S. NAVY AND CHIEF PATHOLOGIST, U.S. NAVY, ACCOMPANIED BY PLATO CACHERIS, ESQ., HUNDLEY & CACHERIS, P.G., WASHINGTON, D.C.; AND CHARLES F. GESCHICKTER, JR., ESQ., BRAULT, LEWIS, GESCHICKTER & PALMER, FAIRFAX, VA.

Dr. GESCHICKTER. The Geschickter Fund had already been in being since 1939 and was doing research in cancer and in chronic diseases. The original contract with the fund, given us by the CIA, was for a group of anticancer compounds that had already been published in 1951. I have reprints of these compounds and their use on cancer patients.

Subsequent to this, the CIA enlarged their grants to my laboratory at Georgetown which was being supported by the Geschickter Fund and by the NCI grants and ultimately from grants from the Army's Institute of Walter Reed Research, and they agreed to supply funds to continue the research as we had done previously because of our capabilities in synthetic chemistry and in their reading of their usefulness in physiology by a unique procedure, that was giving of material to rats and subsequently analyzing their effects through microscopic preparations of virus organs. This is not usual in pharmacology. Our laboratory represented practically the only one in the world that was assaying new chemicals by this lustologic method. We did not furnish monies knowingly to other universities for separate projects until 1955. The Agency came in with moneys for other universities who submitted proposals for ongoing research, and none of this research, neither in Geschickter Fund Laboratory nor in the universities supported through the Geschickter Fund by the CIA, ever had any research instituted by the CIA.

These were ongoing projects in reputable universities and hospital centers, and never did they depart from their usual practices because of the CIA grant.

Senator KENNEDY. Why was the CIA in it? Were they interested in cancer research?

Dr. GESCHICKTER. If you read their reports, you will find one of the byproducts of this will be cancer research advancement and they were interested in picking up whatever ideas——

Senator KENNEDY. Do you believe that this is what they were interested in, or is that just a statement that they were interested?

Why would the CIA be interested?

Dr. GESCHICKTER. I can only give you the report that came to me from Allen Dulles, and I will quote it: "Thank God there is something decent coming out of our bag of dirty tricks. We are delighted."

Senator KENNEDY. We will get into some of those other ones. Can you tell us why you got involved with the CIA funding?

Dr. GESCHICKTER. I would like for Senator Schweiker and yourself to have copies of these reports.

Senator KENNEDY. They will be made a part of the record.

[The information referred to follows:]

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A HYPERSENSITIVITY PHENOMENON PRODUCED BY STRESS: THE "NEGATIVE PHASE" REACTION

CHARLES F. GESCHICKTER, M.D., W. EDWARD O'MALLEY, M.D., PH.D., AND EUGENE P. RUBACKY, PH. D.

Georgetown University School of Medicine, Washington, D. C.

The role of stress in disease has been a source of controversy and interest since Selye[1, 9] first published his unprecedented observations on the general adaptation syndrome. Since that time, an extensive literature has accumulated on the effects of prolonged stress on the pituitary-adrenal axis; however, the effects of a single brief episode of stress has received little attention. The stresses of life are most commonly short and intermittent. It therefore seemed of great interest to assess the effects of a single brief stress episode on adrenal-cortical function. These studies were stimulated by a surprising finding during the course of investigations on Alarmine, a substance discovered by Geschickter and associates[3] to produce lesions simulating those of the collagen diseases.

Selye[10, 11] demonstrated that chronic daily administration of ACTH and cortisol prevented the anaphylactoid reaction to the intraperitoneal injection of fresh egg albumin in the rat. It was noted that in Alarmine-treated rats the injection of egg white caused no reaction. This was unexpected and occurred even after a single injection of Alarmine. Thus, rats that were treated with 1 dose of Alarmine responded in a manner identical with that of rats conditioned for a long period of time by repeated therapy with ACTH or cortisol. The anaphylactoid reaction in the white male rat following the intraperitoneal injection of 2.0 ml. of fresh egg white obtained from the hen's egg consists of conspicuous edematous swelling around the paws, tongue, nose, and scrotum. This response appears regularly within 60 to 90 min. following the injection, and it occurs in the absence of a preceding sensitizing dose of egg white. All rats are susceptible, and the edematous response is relatively uniform and can be observed grossly.

Several other stressor substances were tested for antianaphylactoid activity. They included formalin, nitrogen mustard, and epinephrine hydrochloride. All of these substances in a single dose prevented the anaphylactoid reaction, apparently by provoking the general adaptation syndrome (GAS), which involved the pituitary-adrenal axis. Epinephrine was selected for further study. Its use permits the administration of a quantitated degree of stress for a very short time interval. The effects of this brief stress can be studied for many hours thereafter.

The studies herein reported were designed to elucidate the immediate and long-term effects of a single stress episode produced by the injection of epinephrine. Less extensive parallel studies were conducted using formalin, Alarmine, and nitrogen mustard. The egg white anaphylactoid reaction was used as an indicator system in studying these reactions.

These experiments demonstrate that whereas a mild acute bout of stress in animals protects against immediate sensitivity reaction, it subsequently but transiently weakens the organism's resistance to further stress. These findings are in marked contrast to the currently held concept that in intermittent chronic stress conditions the organism becomes resistant to future stresses.

Received, November 21, 1959; accepted for publication February 29, 1960.

Dr. Geschickter is Professor of Pathology, and Dr. O'Malley is Research Assistant, Department of Pathology.

This work was supported by a grant from the Geschickter Fund for Medical Research.

EXPERIMENTAL PROCEDURES

Experiment No. 1. Epinephrine hydrochloride, 0.1 ml. of 1:1000 solution, was administered subcutaneously to 170 white male Wistar rats that weighed 100 to 120

Gm. each. Following this, 2 ml. of fresh hen egg white were administered intraperitoneally at each of the following time intervals to groups of 10 of the epinephrine-treated rats: 1 hr. and ½ hr. before the administration of epinephrine; simultaneously with the administration of epinephrine; ½ hr., 1 hr., and 1½ hr. after the administration of epinephrine; and every hour thereafter for 6 hr., and then every 3 hr. thereafter for 12 hr. A single group of 16 rats not treated with epinephrine served as a control, and they received only 2 ml. of egg white intraperitoneally. Responses to egg white 1 hr. after injection were recorded as 0 to 4 plus, according to the severity of the reaction (Table 1). It will be seen that the stress invoked by epinephrine protected against the anaphylactoid reaction to egg white for approximately 2 hr. after a post-epinephrine period has elapsed.

Experiment No. 2. Forty-five hypophy-

TABLE 1

EXPERIMENT NO. 1—RESPONSE OF RATS TO INTRAPERITONEAL INJECTION OF EGG WHITE AFTER TREATMENT WITH EPINEPHRINE

Number of Group	Number of Rats	1-Hr. Response to Egg White					
		0	+1	+2	+3	+4	
I. Control group (no epinephrine)	16	0	1	4	5	6	
II. Egg white* 1 hr. before epinephrine†	10	0	0	7	1	2	
III. Egg white ½ hr. before epinephrine	10	0	0	5	5	0	
IV. Egg white at time of epinephrine	10	3	2	1	0	4	
V. Egg white ½ hr. after epinephrine	10	9	1	0	0	0	
VI. Egg white 1 hr. after epinephrine	10	10	0	0	0	0	Protected
VII. Egg white 1½ hr. after epinephrine	10	10	0	0	0	0	
VIII. Egg white 2 hr. after epinephrine	10	5	2	3	0	0	
IX. Egg white 3 hr. after epinephrine	10	0	0	2	6	2	
X. Egg white 4 hr. after epinephrine	10	0	0	2	8	0	
XI. Egg white 5 hr. after epinephrine	10	1	0	3	2	4	
XII. Egg white 6 hr. after epinephrine	10	1	0	4	4	1	
XIII. Egg white 7 hr. after epinephrine	10	0	2	6	2	0	
XIV. Egg white 8 hr. after epinephrine	10	1	2	4	3	0	
XV. Egg white 11 hr. after epinephrine	10	0	0	5	4	1	
XVI. Egg white 14 hr. after epinephrine	10	1	1	2	6	0	
XVII. Egg white 17 hr. after epinephrine	10	0	1	4	3	2	
XVIII. Egg white 20 hr. after epinephrine	10	0	0	2	8	0	

* Egg white—2 ml. per rat intraperitoneally.

† Epinephrine HCl—0.1 ml. of 1:1000 solution subcutaneously.

sectomized male Wistar rats, weighing 200 to 250 Gm. each, were divided into 9 groups of 5 rats each. Ten days postoperatively they all were injected subcutaneously with 0.1 ml. of a 1:1000 epinephrine hydrochloride solution. Egg white was administered intraperitoneally at each of the following time intervals to groups of 5 rats: 1 hr. before the administration of epinephrine; simultaneously with the administration of epinephrine; and 1, 2, 4, 6, 9, and 18 hr. after the administration of epinephrine. Another group of 5 hypophysectomized rats received egg white but no injection of epinephrine. They served as controls. Anaphylactoid reactions were observed and graded 0 to 4 plus 1 hr. following administration of egg white (Table 2). It will be seen that no adequate protection resulted from injection of epinephrine in the absence of the hypophysis.

Experiment No. 3. Experiment No. 2 was duplicated, substituting 45 adrenalectomized rats injected 2 days postoperatively (Table 3). Again, no adequate protection was achieved in the absence of the adrenal gland.

Experiment No. 4. One hundred and

TABLE 2

EXPERIMENT NO. 2—RESPONSE OF HYPOPHYSECTOMIZED RATS TO INJECTION OF EGG WHITE AFTER PRIOR TREATMENT WITH EPINEPHRINE

Number of Group	Number of Rats	1-Hr. Response to Egg White				
		0	+1	+2	+3	+4
I. Control group (no epinephrine)	5	0	1	1	2	1
II. Egg white* 1 hr. before epinephrine†	5	0	1	2	2	0
III. Egg white at time of epinephrine	5	2	2	1	0	0
IV. Egg white 1 hr. after epinephrine	5	0	1	2	1	1
V. Egg white 2 hr. after epinephrine	5	1	1	3	0	0
VI. Egg white 4 hr. after epinephrine	5	0	2	2	1	0
VII. Egg white 6 hr. after epinephrine	5	1	0	2	2	0
VIII. Egg white 9 hr. after epinephrine	5	0	2	1	1	1
IX. Egg white 18 hr. after epinephrine	5	1	0	1	2	1

* Egg white—2 ml. per rat intraperitoneally.

† Epinephrine HCl—0.1 ml. of 1:1000 solution subcutaneously.

TABLE 3

RESPONSE OF ADRENALECTOMIZED RATS TO INJECTION OF EGG WHITE AFTER PRIOR TREATMENT WITH EPINEPHRINE

Number of Group	Number of Rats	1-Hr. Response to Egg White				
		0	+1	+2	+3	+4
I. Control group (no epinephrine)	5	0	0	1	2	2
II. Egg white* 1 hr. before epinephrine†	5	0	0	0	5	0
III. Egg white at time of epinephrine	5	0	2	1	1	1
IV. Egg white 1 hr. after epinephrine	5	0	0	1	4	0
V. Egg white 2 hr. after epinephrine	5	0	0	0	3	2
VI. Egg white 4 hr. after epinephrine	5	0	0	4	0	1
VII. Egg white 6 hr. after epinephrine	5	0	1	1	2	1
VIII. Egg white 9 hr. after epinephrine	5	0	1	2	0	2
IX. Egg white 18 hr. after epinephrine	5	0	0	2	3	0

* Egg white—2 ml. per rat intraperitoneally.

† Epinephrine HCl—0.1 ml. of 1:1000 solution subcutaneously.

twenty male Wistar rats, weighing between 100 and 120 Gm. each, were divided into 12 groups of 10 rats each. Groups I to IV were administered 1.0 mg. per kg. of hydrocortisone solution intraperitoneally. Groups V to VII† were administered 10 mg. per kg. of hydrocortisone solution intraperitoneally. Groups IX to XII were administered 100 mg. per kg. of hydrocortisone solution intraperitoneally. Groups I, V, and IX were administered 2 ml. of egg white intraperitoneally $^1/_2$ hr. following the administration of hydrocortisone. Groups II, VI, and X received 2 ml. of egg white intraperitoneally $1^1/_2$ hr. after the administration of hydrocortisone. Groups III, VII, and XI received 2 ml. of egg white intraperitoneally 5 hr. after the administration of hydrocortisone. Groups IV, VIII, and XII received 2 ml. of egg white intraperitoneally 14 hr. after the administration of hydrocortisone. Reactions to injections of egg white were noted and graded in the manner previously described (Table 4). It will be seen that in contrast to epinephrine, varying doses of hydrocortisone administered as a single dose gave no protection when the animals were challenged at varying time intervals.

Experiment No. 5. Sixty male Wistar rats, weighing 100 to 120 Gm. each, were divided into 3 equal groups of 20 each. Group I received hydrocortisone, 20 mg. per kg. subcutaneously twice daily for 2 weeks. Group II received 0.1 ml. of 0.9 per cent solution of sodium chloride twice daily for 2 weeks. Group III received 10 units per kg. of ACTH intramuscularly twice daily for 2 weeks. Following the last injection, all 60 rats were administered 2 ml. of egg white intraperitoneally. Reactions were observed and recorded as stated above (Table 5). It will be seen that chronic doses of hydrocortisone and ACTH failed to protect.

Experiment No. 6. Twenty hypophysectomized and adrenalectomized male Wistar rats, weighing approximately 200 Gm. each, were divided into 4 groups of 5 rats each, 10 days postoperatively. Group I received 2 ml. of egg white per rat intraperitoneally. Group II received 0.1 ml. of 1:1000 epinephrine hydrochloride solution subcutaneously; $^1/_2$ hr. later 2 ml. of egg white per rat was administered intraperitoneally. Group III received 20 mg. per kg. of hydrocortisone solution intraperitoneally; $^1/_2$ hr. later 2 ml. of egg white per rat was administered intraperitoneally. Group IV received both 0.1 ml. of 1:1000 epinephrine hydrochloride solution subcutaneously and

TABLE 4

EXPERIMENT NO. 4—EFFECT OF ACUTE ADMINISTRATION OF HYDROCORTISONE ON REACTION TO EGG WHITE

Number of Group*	Dose of Hydrocortisone	Time of Administration of Egg White†	Average 1-Hr. Response to Egg White
	mg. per kg.		
I	1.0	$^1/_2$	+3
II	1.0	$1^1/_2$	+4
III	1.0	5	+3
IV	1.0	14	+3
V	10	$^1/_2$	+3
VI	10	$1^1/_2$	+4
VII	10	5	+2
VIII	10	14	+4
IX	100	$^1/_2$	+4
X	100	$1^1/_2$	+3
XI	100	5	+4
XII	100	14	+4

* Ten male rats to each group
† Hours after hydrocortisone.

TABLE 5

EXPERIMENT NO. 5—EFFECT OF CHRONIC ADMINISTRATION OF HYDROCORTISONE ON RESPONSE TO INJECTED EGG WHITE

Number of Group	Treatment	1-Hr. Response to Egg White				
		0	+1	+2	+3	+4
I	Treated with hydrocortisone* for 14 days; 20 rats	0	0	[illegible]	12	5
II	Treated with saline solution for 14 days; 20 rats	0	0	8	8	4
III	Treated with ACTH† for 14 days; 20 rats	3	1	6	8	2

* Hydrocortisone—20 mg. per kg. subcutaneously twice daily.
† ACTH—10 units per kg. intramuscularly twice daily.

TABLE 6

EXPERIMENT NO. 6—EFFECT OF ACUTE ADMINISTRATION OF EPINEPHRINE AND HYDROCORTISONE ON HYPOPHYSECTOMIZED-ADRENALECTOMIZED RATS

Number of Group	Number of Rats	Drugs	1-Hr. Response to Egg White				
			0	+1	+2	+3	+4
I	5	None	0	0	0	5	0
II	5	Epinephrine*	0	0	0	4	1
III	5	Hydrocortisone†	0	0	0	0	5
IV	5	Epinephrine and Hydrocortisone	4	1	0	0	0

* Epinephrine—0.1 ml. of 1:1000 solution subcutaneously.

† Hydrocortisone solution—20 mg. per kg. intraperitoneally.

20 mg. per kg. of hydrocortisone intraperitoneally; ½ hr. later 2 ml. of egg white per rat was administered intraperitoneally. Reactions were observed and results recorded as above (Table 6). It will be seen that in hypophysectomized-adrenalectomized rats, a combination of adrenalin and hydrocortisone offered protection.

RESULTS

Experiment No. 1. The responses of the normal male rat to injection of 2.0 ml. of egg white intraperitoneally include severe swelling of the paws, snout, tongue, scrotum, and ears. This response usually is manifested in approximately 1 hr. It is predicated upon a natural or inborn hypersensitivity of the rat to egg albumin and needs no previous conditioning. Reference to Table 1 reveals that this reaction was blocked during the period of approximately 1½ to 2½ hr. after administration of epinephrine, that is, when egg white was administered ½ to 1½ hr. after administration of epinephrine. A lesser degree of blockage by epinephrine was noted before and after this period of time, but it will be noted that rats were more sensitive to injection of egg white 4 to 7 hr. after injection of epinephrine. Not only were responses accentuated, but also the reaction occurred within 30 min. after injection of egg white instead of 1 hr. Figure 1 illustrates this "negative phase" of hyperreactivity.

Experiments No. 2 and 3. Hypophysectomized and adrenalectomized rats treated with epinephrine responded in a manner identical with that of control hypophysectomized and adrenalectomized rats, with the exception of 1 group. This group received injections of epinephrine and egg white simultaneously, and was afforded some slight degree of protection against the anaphylactoid response (Tables 2 and 3), apparently because of transient peripheral vasoconstriction. The adrenal-

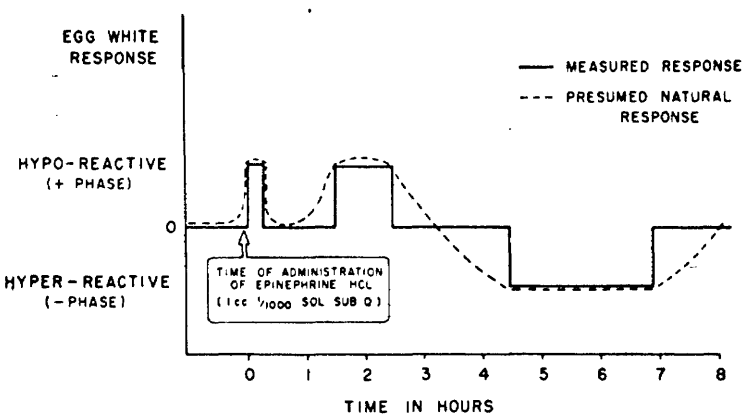

FIG. 1. Curve indicating the responses to injections of egg white administered 1 hr. prior to observations

ectomized animals responded to injections of egg white more vigorously and, at times, with convulsions. This was more conspicuous than in the hypophysectomized animals.

Experiment No. 4. It will be noted that acute therapy with single doses of hydrocortisone failed to modify the reaction to egg white (Table 4).

Experiment No. 5. Chronic therapy with bidaily doses of hydrocortisone and ACTH likewise failed to modify the reaction to egg white (Table 5).

Experiment No. 6. Epinephrine and hydrocortisone, when administered simultaneously, prevented the anaphylactoid reaction in the hypophysectomized-adrenalectomized rats (Table 6). Either compound alone was ineffective.

DISCUSSION

Selye[1] first demonstrated that the degree of reaction suffered by the rat upon injection of egg white was a measure of the prophlogistic status of the animal. Reference to Table 1 establishes that intact rats remain in an antiphlogistic state, failing to react to injection of egg white for 1½ to 2½ hr. after the administration of a single dose of 0.1 ml. of 1:1000 epinephrine subcutaneously. These findings are in accord with those of Clark and MacKay,[2] who also demonstrated blockade of the anaphylactoid reaction by epinephrine. Furthermore, it will be noted that the animals then suffer a "rebound" effect, becoming hyperreactive for 4 to 7 hr. following administration of epinephrine. A more rapid onset and increased edema resulted in reaction to egg white. This prophlogistic hyperreactive state is, on occasion, severe enough to cause convulsions.

We have referred to the hypersensitivity rebound effect as the "negative phase." During the negative phase rats previously treated with epinephrine are more sensitive to the anaphylactoid reaction than normal, untreated rats. This illustrates a temporary period of weakening of the organism's defenses resulting from prior stress.

It seems that these short, intermittent periods of stress cause hypersusceptibility to a noxious agent, egg white. One is tempted to compare these findings with the delayed hypersensitivity response of rheumatic fever and glomerulonephritis to streptococcal infections, or to the increased incidence of pneumonitis and upper respiratory infection following sudden changes in seasonal temperature. It also may be compared to the postpuerperal exacerbations of rheumatoid arthritis.

Recently, Kitay and his co-workers[4] have demonstrated that a single dose of epinephrine tends to deplete the amount of ACTH available for immediate release from the pituitary gland in acute distress. The pituitary gland thereby becomes less responsive to successive stresses. Our studies are consistent with these findings.

Although the "negative phase" is similar to Selye's[3] exhaustion stage of the general adaptation syndrome, it differs by being a more acute, frequent, and repetitive occurrence, and of a lesser degree of severity than that observed with exhaustion (Fig. 1). It bears no relation to delayed shock and is reversible. The organism's expenditure for protection by means of the general adaptation syndrome apparently can detract from its ability to provide protection in the immediate future, as illustrated. Within 18 hr. the organism has returned to the normal pretreatment reactive status. These results are indicative of a pharmacologic action of epinephrine persisting up to 18 hr., an agent usually regarded as having a duration of action of only a few minutes. In this respect, our results parallel those of Kaplan and Gant,[5] who have demonstrated a delayed hyperlipemic action of epinephrine.

References to Tables 2 and 3 support the contention that acute effects of administration of epinephrine on the egg white reaction are mediated, at least in part, *via* the pituitary-adrenal axis. It will be noted that epinephrine itself produces no protective effect in the hypophysectomized or adrenalectomized rat. There are no "negative phase" results. It was, therefore, of additional interest to determine if the effects of administration of epinephrine were mediated through a final common pathway of increased production of cortisone. Even large, single doses of cortisone (as recorded in Table 4) failed to elicit a

protective antiphlogistic effect. The usual 4 to 7 hr. prophlogistic effects (negative phase) were similarly absent. It was noted at this time that rats injected with large doses of cortisone by an inexperienced technician were protected against the anaphylactoid reaction. It was postulated that the increased manipulation of these rats resulted in liberation of endogenous epinephrine, thereby explaining the antiphlogistic protective effects.

The foregoing observations posed an interesting question. A single dose of cortisone, carefully administered in a gentle manner (in order to avoid frightening the rat, with concomitant liberation of endogenous epinephrine) fails to be antiphlogistic. Selye[10] reported that chronic administration of ACTH and cortisol is antiphlogistic. It seemed possible that the stress of daily injections, liberating epinephrine, rather than cortisol, or administration of ACTH might be the basis for the antiphlogistic state so produced. For this reason, the chronic effects of ACTH and cortisol were again studied.

The questionable factor of epinephrine liberated by the daily pain and fright of injection, feeding, noise, and caging was minimized. The animals were isolated in a quiet room and handled by skilled workers. Reference to Table 5 reveals that under these conditions no difference exists in the egg white reactivity of cortisone- and saline-treated controls. These results are in agreement with those of Morrison and his co-workers[7] and of Swingle,[12] who also failed to prevent the anaphylactoid reaction by injection of cortisone. These results are in opposition to those of Swingle,[12] in that epinephrine in our hands prevented the anaphylactoid reaction in the intact rat. Cannon,[1] in his original demonstrations of the "flight or fight" response, measured the ability of the organism to resist noxious attack largely in terms of sympathetic nervous system effects and epinephrine. Selye,[8] in turn, has demonstrated cortisone to be of vital importance in similar situations. It now seems that neither, alone, suffices for maximal defense by endogenous agents. Both, together, must be present in increased quantities to be of value. One is tempted to conclude that the proximity of the adrenal cortex and adrenal medulla is more than accidental.

The data presented seem to illustrate the necessity of the liberation of both cortisol and epinephrine, in order to bring about protection against the anaphylactoid reaction (Table 6, Group IV).

It is of interest to note that Halpern and associates[4] observed that treatment with cortisone may enable adrenalectomized mice to tolerate 5 otherwise lethal doses of histamine. Epinephrine alone enabled adrenalectomized mice to tolerate 5 to 10 lethal doses of histamine. Together, epinephrine and cortisone enabled the adrenalectomized animal to tolerate 50 to 100 lethal doses of histamine, thereby restoring histamine tolerance to normal levels.

It seems that the protection expended in warding off the noxious anaphylactoid reaction imposes the hazard of future hypersusceptibility. The latter has been termed by us a "negative phase." Its role in human disease remains to be elucidated. These studies, however, suggest that the ability of the human body to withstand the onslaught of disease following short bouts of stress, whether psychic or physical, should receive more study.

It is known from clinical and subjective experience that stress provoked by psychic mediation evolves within seconds, rather than in the 30 or more minutes required for epinephrine to mediate the protective action of the general adaptation syndrome. It therefore seems possible that psychic stimulation, operating by neural pathways, can act directly on end-organs, including the adrenal medulla and perhaps the cortex, without involving the hypophysis. This is suggested in our experiments by the fact that the injection of both adrenalin and cortisone afford some protection in the absence of the hypophysis and the adrenal gland. The immediate effects of stress will be the subject of a subsequent paper.

SUMMARY

1. The effects of acute episodes of stress were measured, using the egg white anaphylactoid reaction.

2. A "negative phase" period of hy-

persensitivity was elucidated. It occurs shortly after the initial protection afforded by stress to the organism. The significance of the "negative phase" response was discussed.

3. A co-relationship of epinephrine and cortisone in stress reactions was demonstrated. Neither singularly suffices to evoke the degree of protection elicited by the combination of the 2 substances.

SUMMARIO IN INTERLINGUA

1. Le effectos de episodios de stress acute esseva mesurate per medio del reaction anaphylactoide a clara de ovo.

2. Un periodo de "phase negative" del hypersensibilitate esseva constatate. Illo occurre brevemente post le protection initial que es providite al organismo per le stress. Le signification del responsa de "phase negative" es discutite.

3. Un co-relation de epinephrina e de cortisona in reactiones de stress esseva demonstrate. Ni le un ni le altere sol suffice a evocar le grado de protection que es evocate per le 2 substantias in combination.

REFERENCES

1. CANNON, W. B.: Bodily Changes in Pain, Hunger, Fear and Rage, Ed. 2. New York D. Appleton & Company, 1934, p. 404.
2. CLARK, W. G., AND MACKAY, E. M.: Effect of *l*-epinephrine and *l*-arterenol on egg white edema in the rat. Proc. Soc. Exper. Biol. & Med., **71:** 86-87, 1949.
3. GESCHICKTER, C. F., ATHANASIADOU, P. A., AND O'MALLEY, W. E.: The role of mucinolysis in collagen disease. Am. J. Clin. Path., **30:** 93-111, 1958.
4. HALPERN, B. N., BENACERRAF, B., AND BRIOT, M.: Potentiation by adrenaline of protective effect of cortisone on histamine toxicity in adrenalectomized mice. Proc Soc. Exper. Biol. & Med., **79:** 37-39, 1952.
5. KAPLAN, A., AND GANT, M.: Epinephrine and blood lipids. Paper presented at American Physiological Society, San Francisco, California, 1955.
6. KITAY, J. I., HOLUB, D. A., AND JAILER, J. W.: "Inhibition" of pituitary ACTH release after administration of reserpine or epinephrine. Endocrinology, **65:** 548-554, 1959.
7. MORRISON, J. L., RICHARDSON, A. P., AND BLOOM, W. L.: Effects of antihistaminic agents on reaction of rat to dextran. Arch. internat. pharmacodyn., **88:** 98-105, 1951.
8. SELYE, H.: The alarm reaction (abstract). Canad. M. A. J., **34:** 706, 1936.
9. SELYE, H.: A syndrome produced by diverse nocuous agents. Nature, **138:** 32, 1936.
10. SELYE, H.: Studies on adaptation. Endocrinology, **21:** 169-188, 1937.
11. SELYE, H., AND JASMIN, G.: Screening of possible therapeutic agents by means of experimental replicas of connective-tissue diseases. Ann. New York Acad. Sc., **64:** 481-493, 1956-1957.
12. SWINGLE, W. W.: Unpublished observations. Quoted by COHEN, H., GRAFF, M., AND KLEINBERG, W.: Inhibition of dextran edema by proteolytic enzymes. Proc Soc Exper. Biol. & Med., **88:** 517-519, 1955.

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THE ROLE OF MUCINOLYSIS IN COLLAGEN DISEASE

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The term *collagen disease*, according to Klemperer,[2] refers to "generalized alteration of the connective tissue, particularly to abnormalities of its extracellular component, . . ." and "includes rheumatic fever, rheumatoid arthritis, polyarteritis, acute lupus erythematosus, generalized scleroderma and dermatomyositis." Klinge[3] first proposed that this group of rheumatoid diseases represents pathologically a systemic involvement of the entire connective tissue of the human body, and he postulated that the intercellular components are the primary site of damage.

The histopathologic features common to this group of diseases are:

1. Mucinous or myxoid degeneration of the ground substance of connective tissue.
2. Fibrinoid degeneration involving both the matrix and collagenous fibers.
3. Vasculitis of medium-sized and small blood vessels, varying from thrombonecrosis to perivascular edema and "cuffing" with plasma cells and monocytes.
4. Focal histologic changes peculiar to the individual collagen disease, such as the Aschoff body in acute rheumatic fever, rheumatoid nodules in rheumatoid arthritis, "wire looping" in the glomeruli of disseminated lupus erythematosus, and capillary platelet thrombosis in thrombocytopenic purpura.

Among the histochemical reactions observed are:

1. The formation of L.E. cells, which contain depolymerized desoxyribose nucleic acid.
2. Elevation of hexosamine in the blood serum (from split glycoproteins).
3. Elevation of serum globulin (alpha 2 or gamma).
4. Amelioration of clinical manifestations by administration of adrenocorticotrophic (ACTH) or adrenal cortical hormones.

Whether the collagen diseases represent examples of the hypersensitivity state or belong to the category of endocrine imbalance resulting from the general adaptation syndrome is still disputed. Ignorance of the etiology of these conditions makes it impossible to state whether all of the diseases proposed for this category actually belong there. The problem of etiology would be advanced at least 1 step forward, if it could be demonstrated that the pathologic and histochemical features referred to above could be reproduced experimentally by a single agent of injury. The present report indicates that a simple chemical compound can be used to reproduce the main features of all the collagen diseases in experimental animals.

An anticollagen chemical substance. Several compounds of the phenylenediamine class have been utilized in biologic work as dye indicators. McLeod[4] used both dimethyl- or tetramethyl-*p*-phenylenediamine hydrochloride to study the oxidation reactions of gonococcic organisms. More recently, Akerfeldt[1] used the dimethylamino derivative of this compound to study the reaction of the serum in the major psychoses. We chose an isomer of this compound, N,N'-dimethyl-*p*-phenylenediamine, which will be referred to as D'P,P. It has the formula shown in Figure 1.

The preparation of diamine compound used in these experiments was the crystalline base prepared in 2 per cent oily solution. This was applied by repeated daily brushings to the shaved skin of rats. The aqueous solution of the dihydrochloride salt, however, also was used for intramuscular and intravenous injections in other animals. Except for some acute experiments, Wistar rats weighing approxi-

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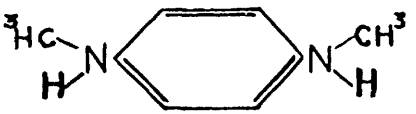


FIG. 1. Formula of D'P,P

mately 120 Gm. each were used. The main features of the results obtained are shown in the accompanying illustrations. The various focal lesions of the collagen diseases were reproduced histologically, including Aschoff-like bodies, the rheumatoid nodules, capillary platelet thrombi, glomeruli "wire looping," and focal fibrinoid degeneration. In addition, animals on chronic treatment showed a 2-fold enlargement of the adrenal cortex, and (apparently as a result of such adrenal changes) there was focal destruction of lymphoid tissue and splenomegaly. Because the chemical used appeared to produce its effects through its mucinolytic action on the connective tissue matrix, particular attention was given to changes in the mucosa of the gastrointestinal tract, which included multiple peptic ulcers with a characteristic punched-out appearance.

The results obtained do not enable us to state what role, if any, this particular chemical compound plays in the histogenesis and etiology of the corresponding natural disease states in man.

Experimental procedures. In the initial experiment, 24 Wistar male rats, weighing 100 Gm. each, were painted twice daily with a 5 per cent solution of N,N'-dimethyl-*p*-phenylenediamine. The pure base was dissolved in 80 per cent diethylhexyl-hexahydrophthalate and 20 per cent benzyl alcohol, and applied to a shaved area of skin on the thigh approximately 2 by 3 cm. in size. The rodents died within 36 to 72 hr. Vesicles or ulcerations of the skin appeared in all rats living more than 48 hr. In some of these rats at autopsy the adrenals were enlarged and hemorrhagic. Histologic studies were performed only on the skin.

In a second series of experiments, 3 groups of Wistar male rats, weighing 120 Gm. each, were painted daily (except Sunday), on the surface of the shaved skin of the thigh over an area of approximately 2 by 3 cm. The diamine compound in the form of the pure base was dissolved in the diethylhexyl-hexahydrophthalate-benzyl alcohol solution referred to above.

Group I, consisting of 8 rats and 4 controls, was painted with a 2 per cent solution.

Group II, consisting of 8 rats and 4 controls, was painted with a 1 per cent solution.

Group III, consisting of 8 rats and 4 controls, was painted with a 0.5 per cent solution.

The solution used for painting is a nonvolatile oily solution prepared from the base. Inhalation is not a complication but the animals bite and lick the irritated surface and ingestion and aspiration of the material probably explains the tendency for the pulmonary vessels to show the most striking changes. It also probably accounts for the appearance of peptic ulcers in some of the animals, although it does not occur in all of them. The animals were not kept in individual cages.

Group I, high dosage. The rats failed to gain in weight and died between 10 and 15 days, living on the average 12 days. The skin showed ulceration and vesicles, but the manifestations were not as extensive as with the 5 per cent solution. At necropsy, the adrenals did not appear to be enlarged. The spleen and lymphoid tissues showed slight atrophy. There was increased secretion in the bronchi, pulmonary edema, and congestion, and the right heart was dilated. Microscopically, exudation of plasma (so-called lymphorrhagia) about the smaller pulmonary vessels was conspicuous (Fig. 2).

FIG. 2 (upper). Changes in the vessels of the lung. There is a perivascular collar of edema and the endothelial cells project into the lumen of the vessels. The rat was brushed 7 times with a 2 per cent solution of D'P,P and died on the 8th day. Hematoxylin and eosin. × 50.

FIG. 3 (lower). Aschoff-like cellular aggregates and capillary dilatation in the myocardium. The cellular aggregates, which are adjacent to small vessels, are at the left and right portion of the band of muscle fibers which runs diagonally across the photograph. The long, slit-like spaces are dilated capillaries. This rat was brushed 6 times with a 2 per cent solution of D'P,P and died on the 7th day. Hematoxylin and eosin. × 100.

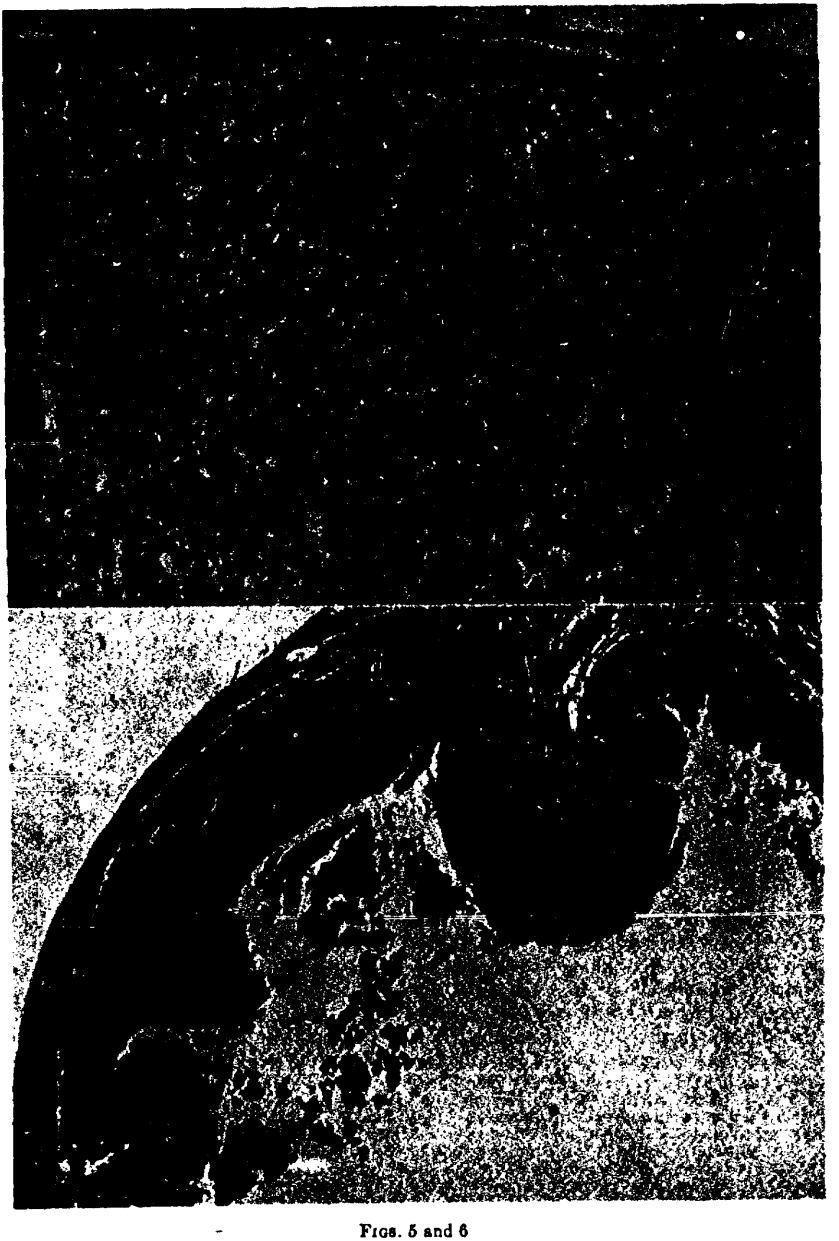
FIGS. 2 and 3

FIG. 4. Higher magnification of the cellular aggregates in Figure 3. In the upper left corner (about 11 o'clock) is a typical Anitschkow cell, and in the lower right corner (about 5 o'clock) is an Aschoff cell. Note the spilling of the erythrocytes from ruptured capillaries illustrated in the upper portion of the photomicrograph. Hematoxylin and eosin. × 220.

The basement membrane of these small vessels showed smudging and dissolution, and the endothelial lining cells, some of which were detached, projected into the lumen. In the heart there were foci of endothelial cells (apparently liberated by dissolution of adjacent capillaries) lying between the myocardial fibers. Some of the sections showed Aschoff-like cellular aggregates (Figs. 3 and 4). There were numerous dilated vascular spaces lined by a single layer of endothelium surrounded by extravasated erythrocytes, which were interpreted as capillary aneurysms. In some

FIG. 5 (upper). Section through the cortex of the adrenal revealing hyperplasia and cytoplasmic vacuoles. The adrenals were grossly enlarged to 4 times their size. This rat was brushed with a 1 per cent solution of D'P,P. The animal died after 2 months. Hematoxylin and eosin. × 120.

FIG. 6 (lower). Low-power photomicrograph of the stomach illustrating 1 of several peptic ulcers which were present in this animal. There is a sharp crater overlaid by desquamated remnants of the glandular mucosa. Peptic ulcers can be produced more consistently by oral administration of D'P,P than by application to the shaved skin. Although this animal was brushed with a 1 per cent solution, it is possible the material was swallowed by licking the wounds. Hematoxylin and eosin. × 30.



FIGS. 5 and 6

of the small arteries in the myocardium, changes in the basement membrane and intima stained positively with periodic acid-Schiff stain, indicating the liberation of mucopolysaccharide material.

In the synovial membranes of the knee joint the capillaries were congested and dilated, some of them undergoing lysis. There was smudging of the ground substance immediately beneath the mesothelial lining layer of the synovial surface. In the bone marrow the capillaries were dilated, and there were areas of coagulated extravasated fluid. The bone marrow elements appeared normal. The spleen showed complete disappearance of its lymphoid pulp, and the surviving germinal centers showed focal necrosis. The thymus and lymph nodes were similarly affected. The other organs were negative. No significant changes were found in the animals of the control group.

Group II, middle dosage. These rats lived a maximum period of 2 months and died usually between the thirtieth and sixtieth day. They failed to gain weight. At autopsy, the lungs were congested and edematous. There was some thickening of the walls of small arteries in the lungs but not of the veins. Histologically, there was some "onion peeling" of the small arteries and arterioles, but similar changes were found in some of the animals in the control group. The heart was dilated and the adrenals were markedly enlarged. Microscopically, the adrenals showed cortical hypertrophy and vacuolization of cells in the zona fasciculata (Fig. 5). The spleen and lymphoid tissues were similar to Group I. Microscopically, the spleen showed reduction of lymphoid tissue and necrosis of germinal centers, with increased number of macrophages, many of which were binucleated. The heart showed focal fibrosis and aggregates of histiocytes but no typical Aschoff bodies. The joint changes in animals that died early were similar to Group I. In the gastric mucosa, the mucus in the superficial glandular crypts was reduced and peptic ulcers were present (Fig. 6). No such changes were found in the animals of the control group.

Group III, low dosage. Some of the rats in this group died 6 weeks after the beginning of the experiments, but some were still living 3 months later. The animals showed progressive gain in weight. At autopsy, the outstanding finding was endothelial proliferation of the lining of small pulmonary vessels. In some of the vessels the lumen was practically occluded. These vessels looked as if they were being recanalized in places and some vessels looked almost like glomeruli. The endothelial proliferation in places extended into the adjacent septums of the lung. This was found in only 2 rats, who may have aspirated the compound while licking their wounds (Fig. 7). Ingestion of the compound in this manner may also have something to do with the formation of peptic ulcers, since animals who are fed D'P, P die of perforated peptic ulcers. These oral experiments were performed by Dr. A. I. Miller, Emory University, Atlanta, Georgia.

The spleen was practically devoid of lymphoid tissue and usually twice its normal weight. The pulp contained many macrophages with numerous foam cells, and there were some granulocytes but practically no lymphocytes. A few germinal centers were intact (Fig. 8). The heart showed areas of fibrinoid degeneration and aggregates of Anitschkow's cells, similar to those shown in Figure 9. In the coronary circulation, the walls of the capillaries were disintegrating, and the liberated endothelial cells accumulated about the adjacent arterioles. The adjacent myofibrils were necrotic and hyalinized. These changes were not as widespread as in the rats on higher dosage. The knee joints showed the microscopic features of rheumatoid arthritis with the formation of rheumatoid nodules in the synovial membrane (Fig. 10). The bone marrow was not remarkable. The brains and kidneys were normal in appearance. In the

FIG. 7 (upper). Endothelial proliferation plugging a small vessel in the lung. This animal was painted with an 0.5 per cent solution of D'P, P daily and lived 6 weeks. Hematoxylin and eosin. × 228.

FIG. 8 (lower). Low-power photomicrograph of spleen. The pulp is entirely replaced by red blood cells and a few scattered macrophages. The focal areas of lymphocytes are remnants of the germinal centers. This animal was painted daily except Sunday for a 5-week period with a 0.5 per cent solution. Hematoxylin and eosin. × 30.

FIGS. 7 and 8

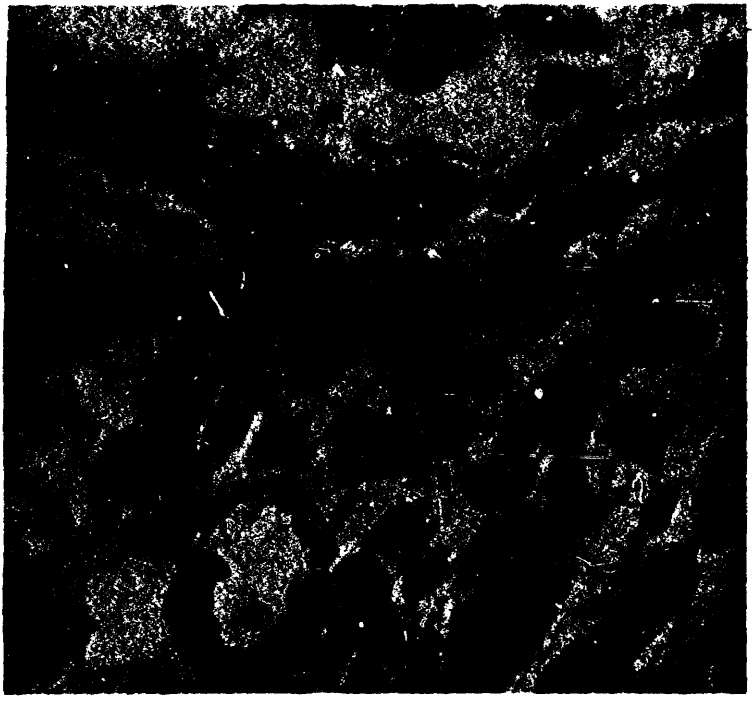
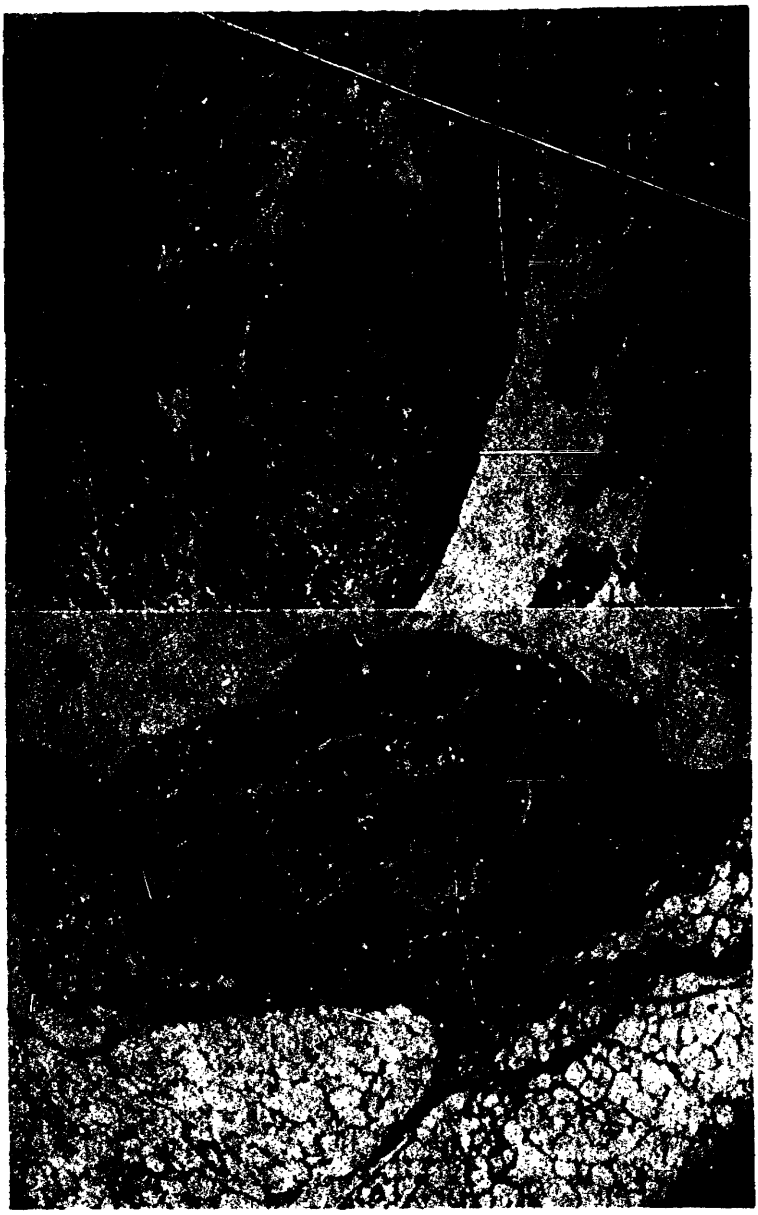


FIG. 9. High-power photomicrograph of an Aschoff body illustrating typical Anitschkow's cells. Two capillaries are seen, 1 in longitudinal and the other in cross-section. The Anitschkow cells seem to be developing in the wall of the capillary. Note the mitotic figure in the upper portion of the photograph. This animal was brushed with a 2 per cent solution of D'P, P daily and lived 7 days. Hematoxylin and eosin. × 400.

region of the kidneys and pancreas, small to medium-sized vessels showed thrombonecrosis or marked endothelial proliferation similar to that found in the lungs (Fig. 11). The skin showed epidermal hyperplasia rather than necrosis in the painted areas. In the subcutaneous tissue of these regions there was marked edema and fibrosis with loss of collagen fibrils, simulating scleroderma (Fig. 12). At times this involved the derma and was accompanied by atrophy of the hair follicles. In the voluntary muscles beneath the painted areas, there were collections of plasma cells and lymphocytes about damaged blood vessels, simulating the lesions of dermatomyositis. In other places the degeneration of muscle fibers resembled muscular dystrophy. In the liver there were increased numbers of cells with acidophilic cytoplasm and binucleated forms but no focal necrosis. Some of the liver cells were vacuolated; others showed hyaline

FIG. 10 (upper). Rheumatoid nodule developing in the synovial membrane of a knee joint. The lesion extends almost to the mesothelial lining. The line passing through the center of the photograph is an artifact. This animal was brushed with an 0.5 per cent solution of D'P,P daily and was sacrificed after 3 months. Hematoxylin and eosin. × 128.

FIG. 11 (lower). Artery manifesting thrombonecrosis and perivascular infiltrate. The vessel is in the perirenal fat. From the same animal illustrated in Figure 10. Hematoxylin and eosin. × 50.



FIGS. 10 and 11

droplet degeneration, and the nuclei were of varying size and density. Some of the small hepatic vessels showed endothelial proliferation as in the lungs. The adrenals were enlarged as a result of cortical hypertrophy. All zones of the adrenal showed increased vascularity. The control rats showed no significant changes.

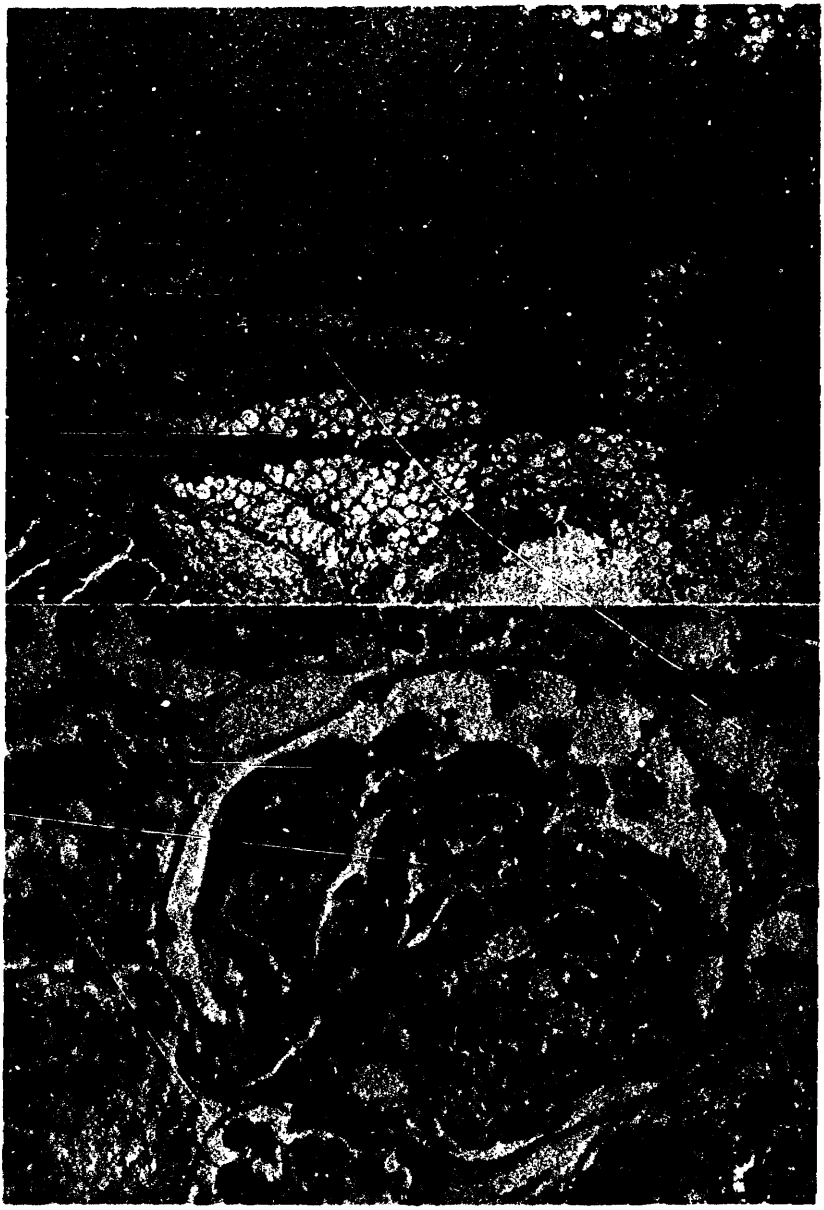
Acute experiments. In the animals surviving 10 or more days, no membranous glomerulitis was found and the "wire looping" of disseminated lupus erythematosus was not reproduced. Theoretically, the lapse of time before sacrifice was sufficient to allow the chemical compound to act as a hapten* and combine with serum albumin and produce an antigenic effect. In order to resolve this question of a possible hypersensitivity reaction and to produce more acute lesions that might involve the kidney, smaller rats were chosen in preference to raising the dosage of the compound. The experimental procedure was repeated with 24 rats, this time using males weighing 60 to 80 Gm. each. The animals were painted daily with a 2 per cent solution of the diamine compound prepared by 2 separate chemical laboratories in order to insure that the experiments would be reproducible (this compound undergoes darkening through oxidation). These animals were sacrificed at intervals of 2 to 4 days. The characteristic changes in the myocardium were produced, as well as membranous glomerulitis in the kidneys, with typical "wire looping," characteristic of disseminated lupus erythematosus (Fig. 13). Some of these rats also showed perivascular lesions of the brain in the form of small focal accumulations of mononuclear cells resembling typhus nodules (Fig. 14 and Table 1).

D'P,P on hypophysectomized rats. Since D'P,P produces enlargement of the adrenals and atrophy of lymphoid tissues, its mechanism of action is possibly that of a stressor or alarming substance (as noted above, its role as a hapten could not be demonstrated). In order to test this interpretation, 2 groups of 10 each of male hypophysectomized rats, weighing 120 Gm. each, were painted with a 2 per cent solution of D'P,P as described in the previous experiments. If this substance is adrenalin-like in action, hypophysectomy should block its untoward effect upon the collagen matrix of connective tissue. The results obtained partially support this interpretation. In the animals surviving 2 to 4 weeks, characteristic changes were observed about the smaller pulmonary vessels. Both arteries and veins were surrounded by a collar of edema and monocytes, and their endothelial lining was destroyed in patches or reduplicated. Some of the vessels contained small mural thrombi. A number of the animals showed peptic ulcers. However, no characteristic rheumatoid nodules were found in the synovial membrane of the knee joint, although in places the synovial lining cells were reduplicated to 4 to 6 layers and stained deeply with hematoxylin and eosin. In some animals the synovial membrane showed highly vascular papillary protrusions in which the connective tissue cells had proliferated about dilated capillaries. The myocardium showed capillary dilatation but no Aschoff bodies or proliferation of endothelial cells were found. Adrenal cortical hypertrophy was absent, and the lymphoid tissue of the spleen, thymus and lymph nodes was unaltered. In general, the changes were not striking outside of the lungs and gastrointestinal tract. The skin changes were not suggestive of scleroderma. It

* Another line of evidence indicating that the diamine compound does not act as hapten was obtained by injecting a group of 12 guinea pigs with the material in 0.5 per cent solution intramuscularly daily for 6 weeks. These animals failed to develop anaphylaxis and all survived the treatment.

FIG. 12 (upper). Dense, fibrotic scarring involving the subcutaneous region in the area painted with D'P,P in a 2 per cent solution daily for 6 days and sacrificed on the seventh day. Remnants of hair follicles show in the upper portion of the photograph. Note the small thrombosed vessel. The underlying musculature is shown in the lower left-hand corner. Similar changes were found in the skin of animals painted with 0.5 per cent solution, who survived for longer than 2 months. Hematoxylin and eosin. × 28.

FIG. 13 (lower). Hyalin thrombi in early membranous glomerulitis in an 80-Gm. rat that was brushed with a 2 per cent solution of D'P.P for 3 days. Hematoxylin and eosin. × 320.



FIGS. 12 and 13

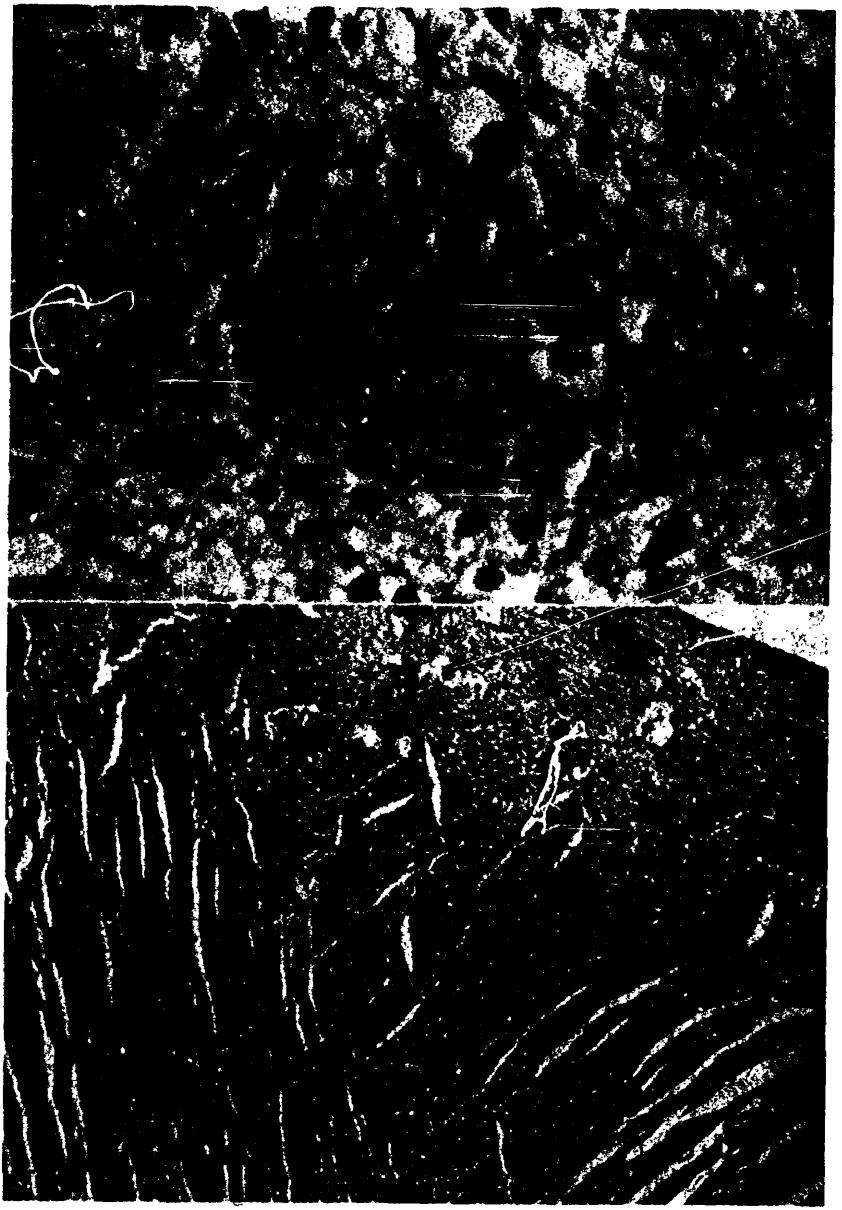


FIG. 14 (upper). Perivascular monocytic infiltrate in the brain of the 80-Gm. rat shown in Figure 13. Hematoxylin and eosin. × 320.

FIG. 15 (lower). Capillary aneurysms in the myocardium following the painting with D'P,P. The irregular slit-like spaces are capillaries cut longitudinally. From an animal painted daily with a 2 per cent solution of D'P,P for 7 days. Hematoxylin and eosin. × 42.

TABLE 1

HISTOLOGIC CHANGES PRODUCED BY N,N'-DIMETHYL-*p*-PHENYLENEDIAMINE IN THE RAT

Vessels of the Heart and Lungs	Other Vessels	Stroma	Lymphoid Tissue	Kidney	Adrenals	Joints and Skin	Gastro-intestinal Tract
Group I: Average duration of treatment, 12 days; painted with 2 per cent solution							
Capillary dilatation, plasma leakage about small vesse's with dissolution of basement membrane and detachment of endothelial cells; Aschoff bodies in myocardium.	No conspicuous changes	No change	Atrophy of pulp; focal necrosis in germinal centers	No change	No change	Joints: Some edema of ground substance, capillary dilatation and congestion. Skin: Ulceration and vesicles	No change
Group II: Average duration of treatment, 1 to 2 months; painted with 1 per cent solution							
Thickening of walls of small arteries in lung; foci of histiocytes in myocardium with capillary aneurysm.	No changes	Some mucoid degeneration	Same as Group I	No changes	Cortical hypertrophy; vacuolization of cells and hemorrhage in zona fasciculata	Similar to Group I	Peptic ulcers in stomach and duodenum
Group III: Average duration of treatment, 2 to 3 months; painted with 0.5 per cent solution							
Plugging of small pulmonary vessels by endothelial cells. Occasional Aschoff bodies in myocardium with adjacent fibrinoid degeneration; necrosis and hyalinization of myocardial fibers.	Thrombonecrosis of medium-sized vessels of kidney and pancreas	Edema and fibrosis of connective tissue	Replacement of pulp and germinal centers by macrophages, with splenomegaly.	No change	Marked hypertrophy and hyperplasia of cortex with increased vascularity	Joints: Rheumatoid nodules in synovial membrane. Skin: Epidermal hyperplasia; fibrosis of derma simulating scleroderma	Occasional peptic ulcer
Group IV: Acute experiments in young rats; duration 2 to 4 days; painted with 2 per cent solution							
Perivascular edema of pulmonary vessels; capillary aneurysms in myocardium, and endothelial aggregates.	Perivascular mononuclear infiltrate about small cerebral vessels.	No change	No change	Wire looping of renal glomeruli	No change	Ulceration of skin; joints: no change	No change

appeared, therefore, that D'P,P has a direct mucinolytic effect in the tissues which it reaches in high concentration, but widespread collagen disease is not produced unless the general adaptation syndrome is provoked in an intact animal. The importance of the tissue concentration of D'P,P in producing collagen disease by direct action is further indicated by vascular and glomerular damage, which we have produced in the dog's kidney by retrograde intravenous injection in the renal vein, which will be reported in a subsequent communication.

The hypophysectomies were apparently adequate since all of the animals showed absence of spermatogenesis and varying degrees of testicular atrophy. In these hypophysectomized animals painted with D'P,P, regressive changes were found in the adrenal medulla. The medullary cells showed shrinkage and vacuolization of their cytoplasm with persistence of sparse numbers of large eosinophilic cells, which resembled ganglion cells.

Adrenalectomy similar to hypophysectomy abolishes most of the changes observed with D'P,P. The animals do not tolerate the skin applications and die early. The effect of the adrenalectomy and administration of cortisone will be discussed in a subsequent communication.

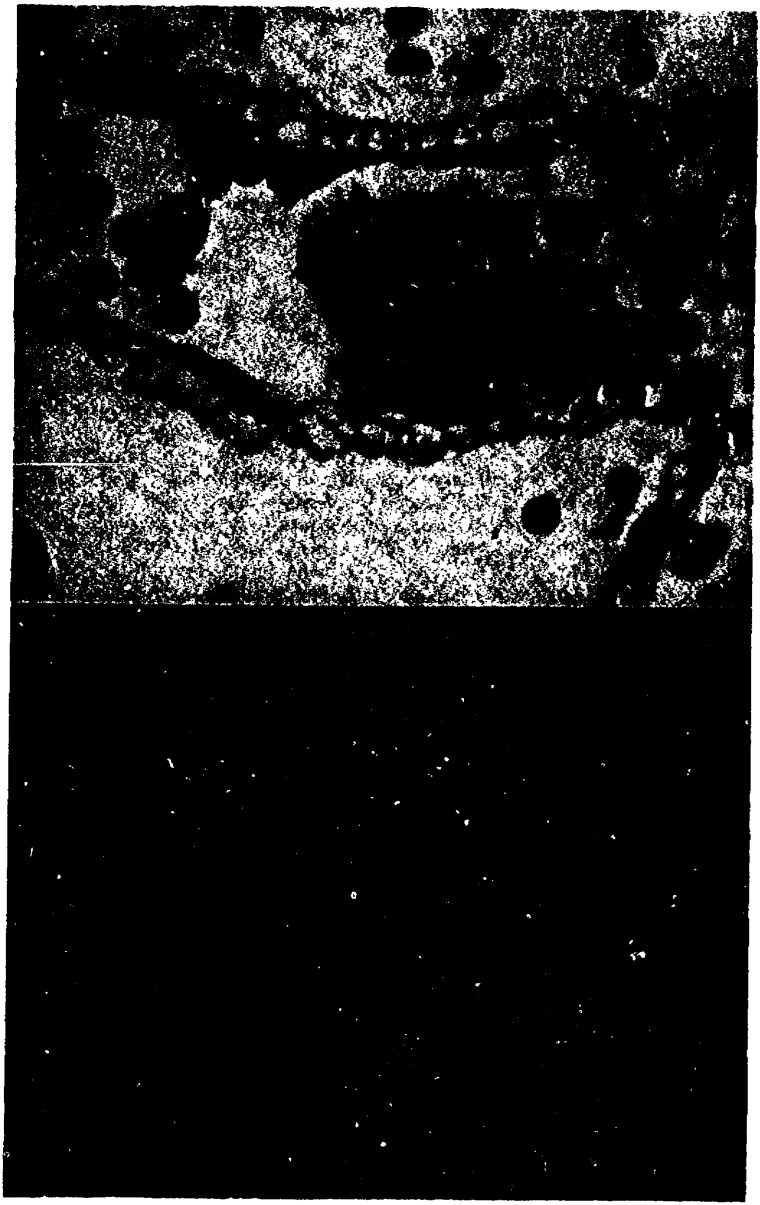
DISCUSSION

The effect of D'P,P on the cement and ground substances. Apparently the primary effect of D'P,P is to produce hydration of the mucopolysaccharide structure of basement membranes and ground substance in mesenchymal tissues. The mucin in the glands of the gastrointestinal tract is also affected. Apparently the most sensitive tissue component is the cement substance in the endothelial wall of capillaries, perhaps because this is the site of the initial contact in the tissue. The earliest stage is "softening," which allows the capillary wall to stretch and form aneurysmal dilatations (Fig. 15). In the basement membrane behind the endothelium in precapillary arteries and in arterioles this hydration can be seen histologically as a chain of small bubbles, which we have termed "beading" (Figs. 16 and 17). In the next stage, the capillary wall disintegrates and the viable endothelial cells and intact erythrocytes spill into the tissue spaces at the point of rupture. Behind the rupture the free ends of the capillary at times retract into the adjacent precapillary artery to form a thrombus encircled by a double row of endothelial cells. In the heart, the liberated endothelial cells from injured capillaries proliferate and migrate toward damaged arterioles and form Aschoff-like cellular aggregates (Fig. 18). In subsequent stages, there is more widespread damage, which results in fusion of erythrocytes, condensation of ground substance to form fibrinoid degeneration and liquefaction of other portions of the matrix, probably aided by plasma leaking from ruptured capillaries. This is followed by shredding of the collagen fibers with subsequent necrosis of these structures and adjacent muscle cells. Fibroblasts are mobilized as histiocytes and show frequent mitotic figures. Myocardial cells are liberated also. Depolymerization and hydrolysis seems to affect the nonviable cement and ground substances and later the collagen fibers. The primary effect is mucinolysis that results in angiolysis and stromatolysis. This deduction, we believe, is justified by the corresponding changes observed in the mucous glands and lining cells of the gastrointestinal tracts (Figs. 6 and 19). However, the foregoing interpretations will require additional experimental verification.

According to the latest chemical studies of collagen, fibrinoid degeneration does not

FIG. 16 (upper). Capillary thrombosis and hydropic change in the basement membrane of precapillary artery in a 43-year-old patient with rheumatic fever, dying following valvulectomy. The vessel was in the meninges. The thrombosed capillary is invaginated in the precapillary artery. Hematoxylin and eosin. × 420.

FIG. 17 (lower). So-called platelet thrombi of the small vessels, in the perirenal fat of an 80-Gm. rat brushed with a 2 per cent solution of D'P,P daily for 3 days. Note the double endothelial wall indicating invagination in the precapillary artery. Note the hydropic changes in the endothelial cytoplasm of the outer wall. Compare with Figure 16. Hematoxylin and eosin. × 320.



FIGS. 16 and 17

initially involve the collagen bundles of well-formed connective tissue fibers. In order to emphasize the sequence of events, it is important to review the composition of connective tissue. Robb-Smith[8] has defined connective tissue as a continuous matrix varying in consistency from the limpidness of Wharton's jelly of the umbilical cord to the hardness of bone, in which lies an interlacing fabric of fibers of different sorts and which is bathing isolated or closely set cells. This continuous matrix pervades the spaces between the organs and major vessels and supplies the capsule, as well as their supporting stroma, for these major structures. Within this matrix the fibroblasts show various stages of development from reticulum cells to adult fibrocytes and also a parallel line of development (usually under pathologic conditions) from reticulum cells to histiocytes (Fig. 20). There is an additional specialized component of connective tissue, the basement membrane. The matrix of connective tissue contains a variety of mucopolysaccharides, such as hyaluronic acid and chondroitin sulfate in combination with proteins. In this matrix are embedded fibers of collagen, reticulin and elastica, which are defined as precipitated scleroproteins. The elastica does not concern us here, but the reticulin and collagen fibers do. The collagen fibers are polymerized polypeptides, which are oriented in linear fashion and contain a small amount of mucopolysaccharide. The reticulin fibrils are similar, but their polypeptide linkages are non-oriented. They may be termed procollagen fibrils because of their less differentiated structure. Both fibers are precipitated or formed from the matrix, influenced by the fibroblast in a manner yet to be determined. The third noncellular structure, the basement membrane, is formed from reticulin fibers and condensed matrix, which stains more intensively for mucopolysaccharides than the ground substance. This condensed matrix at the basement membrane is usually termed cementin and also forms the binding substance between the endothelial cells in the capillary wall.

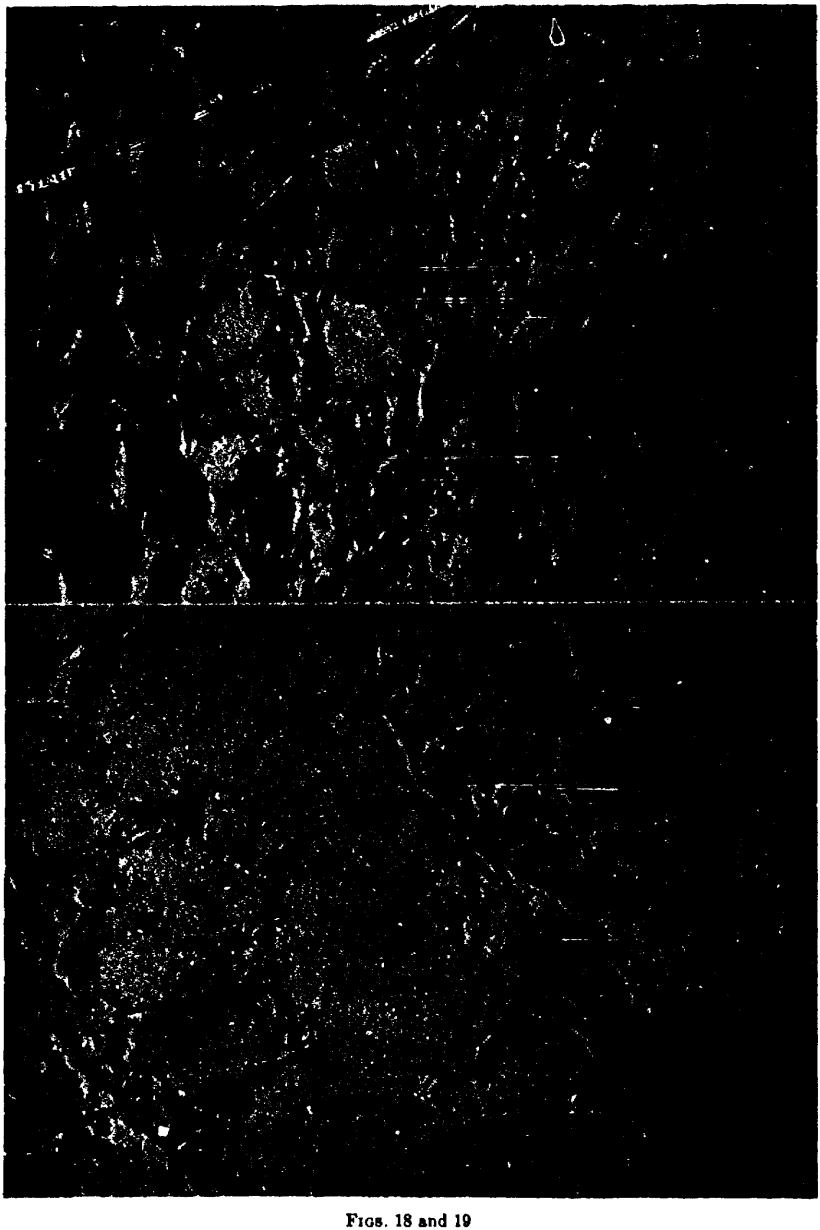
Histogenesis of the Aschoff body. The damage to the cementin of capillaries is the earliest demonstrable change in the experimental production of collagen disease described here. Because this is best seen in the myocardium, the probable histogenesis of the Aschoff body can be traced from this initial change. Following the formation of capillary aneurysms, which is the first change observed, there is leakage of plasma and hydration of the ground substance with subsequent damage to collagen fibrils. Capillary aneurysms and hydration of the ground substance are found within 36 to 48 hr. after the initial painting with D'P,P. Within 48 to 96 hr., there is dissolution of capillaries, liberation of the viable endothelial cells and proliferation of fibroblasts in the edematous matrix. Within this period these mobilized endothelial cells and fibroblasts clump together around damaged arterioles to form the earliest cellular aggregates, which may be looked upon as asceptic granulomas formed in part by the sacrificial dissolution of adjacent capillaries. Within 5 to 7 days, the granulomas continue to enlarge and are accompanied by changes of early dissolution of collagen fibers and the deposition of fibrinoid material. From 8 days to 2 weeks, there is a progressive accumulation of Anitschkow's cells from the damaged myocardial fibers a further fibrinoid degeneration and continued fibroblastic proliferation. Thus, both endothelial cell proliferation and migrating and proliferating fibroblasts contribute to the formation of Aschoff-like bodies, which form after these fixed cells are free from the capillary cementin and the connective tissue matrix, respectively (Table 2).

CONCLUSIONS

A simple irritant amine, which is a strong reducing agent and which apparently lyses the matrix of connective tissue, is capable of

FIG. 18 (upper). Aschoff-like cellular aggregates in process of formation in a rat receiving 7 brushings of a 2 per cent solution of D'P,P. The animal died on the eighth day. The cellular aggregates are endothelial cells migrating from ruptured capillaries, seen to the left. Hematoxylin and eosin. × 220.

FIG. 19 (lower). Mucinolysis in the mucous glands of the larynx manifesting complete dissolution of acinar content. This is taken from the rat with the peptic ulcer illustrated in Figure 6. Hematoxylin and eosin. × 220.



FIGS. 18 and 19

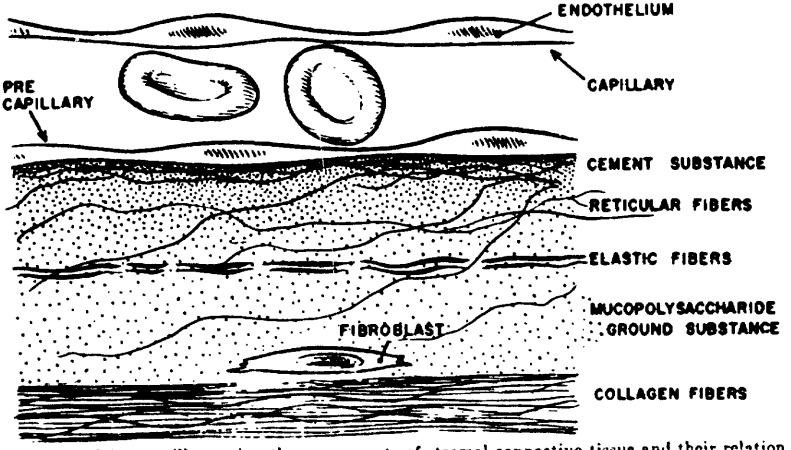


FIG. 20. Diagram illustrating the components of stromal connective tissue and their relation to the capillary wall.

TABLE 2

EVOLUTION OF EXPERIMENTAL ASCHOFF BODIES IN RATS TREATED WITH N,N'-DIMETHYL-p-PHENYLENEDIAMINE

Time	Histologic Changes	
	Capillaries	Stroma
36 to 48 hr.	Softening with beginning mucinolysis of capillary cementin with formation of capillary aneurysms	Hydration of adjacent ground substance
2 to 4 days	Dissolution of capillary wall, liberation of viable endothelial cells	Freeing of fibroblasts in hydrated matrix, separation of reticulin and collagen fibrils; early proliferation of fibroblasts
5 to 7 days	Migration of altered capillary endothelial cells (endothelioid cells) to adjacent damaged arterioles to take part in aseptic granuloma	Migration of altered fibroblasts (histiocytes) to damaged arterioles to take part in aseptic granuloma
	Endothelioid cells and stromal histiocytes form Aschoff-like aggregates accompanied by altered myocytes (Anitschkow's cells)	
8 to 14 days	Focal disappearance of capillaries	Precipitation of matrix as fibrinoid degeneration

reproducing the histopathology of all the more common collagen diseases, as well as inducing peptic ulcers in rats. Its relation to naturally occurring substances in the human disease states is unknown, but it represents a valuable tool for studying the histogenesis of the lesions, as well as the interrelationships between the adrenal cortex and the collagen diseases. Adrenal cortical hypertrophy and atrophy of lymphoid tissues accompany these changes. Aschoff-like bodies in the myocardium, rheumatoid nodules in the joints, and "wire loop" changes in renal glomeruli are found.

The action of this irritant amine is apparently partially direct and partially indirect, since hypophysectomy inhibits many of the characteristic lesions of collagen diseases which were found in the intact animals.

Cardiac lesions simulating Aschoff bodies were not seen consistently except in animals painted with a 2 per cent solution of N,N'-dimethyl-*p*-phenylenediamine (D'P,P). Some of them weighed 120 Gm. and some 80 Gm.; in other words, they were only in Group I and Group IV (Table 1)—the high dosage and the acute experiments, respectively. Scleroderma-like lesions in the skin were seen only with high doses or on the very prolonged treatment (with 2 per cent and 0.5 per cent solutions)—Groups I and III. The adrenal changes were seen in Groups II and III only if the animals lived for 5 or more weeks. The same applies to the marked changes in the spleen and lymph nodes. Endothelial plugging of capillaries in the lung and peptic ulcers probably occurred only in animals that aspirated or swallowed the material by licking their wounds, and the mucinolytic lesions in the mucous glands of the larynx were probably dependent upon the same factor. Renal and cerebral lesions occurred only in the acute experiments, in 80-Gm. rats painted with a 2 per cent solution of D'P,P.

SUMMARIO IN INTERLINGUA

Un simple amina irritante, que es un forte agente reductori e que apparentemente effectua le lyse del matrice de histo conjunctive, es capace a reproducer le histopathologia de omne le plus commun morbos de collageno e a inducer ulceres peptic in rattos. Su relation con substantias de occurrentia natural in statos pathologic in humanos non es cognoscite, sed illo representa un importante adjuta in le studio del histogenese del lesiones e etiam del interrelation del cortice adrenal con le morbos de collageno. Hypertrophia adreno-cortical e atrophia de histos lymphoide accompania iste alterationes. Corpores "aschoffoide," nodulos rheumatoide, e alterationes a "ansa de filo metallic" in le glomerulos renal es incontrate.

Il pare que le action de iste amina irritante es in parte directe e in parte indirecte, proque hypophysectomia inhibi multes del characteristic lesiones de morbos de collageno le qualesseva incontrate in animales intacte.

Lesiones cardiac que simula corpores de Aschoff non esseva trovate uniformemente, excepte in animales pingite con un solution de 2 pro cento de N,N'-dimethyl-*p*-phenylenediamina (D'P,P). Alicunes de illos pesava 120 Gm. e alicunes 80 Gm. In altere parolas, illos esseva solmente in Gruppo I e Gruppo IV (Tabula 1), *i.e.*, le gruppos a alte dosage e a experimentation acute. Lesiones cutanee simile a scleroderma esseva vidite solmente post alte doses o post un tractamento multo prolongate (con solutiones a 2 e a 0.5 pro cento), *i.e.*, in Gruppo I e Gruppo III. Le alterationes adrenal esseva vidite in Gruppo II e in Gruppo III solmente si le animales superviveva 5 septimanas o plus. Le mesmo vale pro le marcate alterationes in le splen e in le nodos lymphatic. Obstruction endothelial del capillares in le pulmones e ulceres peptic occurreva probabilemente solmente in animales que aspirava o ingereva le material per lamber lor vulneres. Le lesiones mucinolytic in le glandulas mucose del larynge resultava probabilemente del mesme factor. Lesiones renal e cerebral occurreva solmente in le experimentos acute, in rattos de 80 Gm. pingite con un solution de 2 pro cento de D'P,P.

REFERENCES

1. Akerfeldt, S.: Oxidation of N,N-dimethyl-*p*-phenylenediamine by serum from patients with mental disease. Science, **125**: 117, 1957.
2. Klemperer, P.: The concept of collagen diseases. Am. J. Path., **26**: 505-519, 1950.
3. Klinge, F.: Der "Rheumatismus," pathologisch-anatomische und experimentell-pathologische Tatsachen und ihre auswertung für das ärztliche Rheumaproblem. Ergebn. d allg. Path. u. path. Anat., **27**: 1-351, 1933.
4. McLeod, J. W., Coates, J. C., Happold, F. C., Priestly, D. P. and Wheatley, B.: Cultivation of gonococcus as method of diagnosis of gonorrhea with special reference to oxydase reaction and to value of air reinforced in its carbon dioxide content. J. Path. & Bact., **39**: 221-231, 1934.
5. Robb Smith, A. H. T.: The Functioning Significance of Connective Tissue. Lectures on the Scientific Basis of Medicine. II. University of London, 1952-1953, The Athlone Press, 1954.

THE USE OF AMINO ACID ANTAGONISTS FOR THE INHIBITION OF TUMOR GROWTH

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THE USE OF AMINO ACID ANTAGONISTS FOR THE INHIBITION OF TUMOR GROWTH*†

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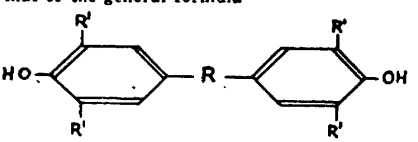
Nutritional factors influence both the origin and growth of tumors. Bischoff et al and later Tannenbaum showed that restriction of caloric intake in experimental animals inhibits the genesis of both sarcomas and carcinomas. The effect of specific factors in the diet, particularly proteins and vitamins, are not definitely established, but a number of reports suggest that restriction of some of the amino acids will inhibit individual types of tumors. Among the amino acids or their derivatives folic acid, cystine, thyroxine, tryptophane, biotin and para-amino benzoic acid appear essential for tumor metabolism. It is interesting to note that some of these amino acids have been classified as "essential," others as "vitamins," and still others as "hormones."

White et al demonstrated that leukemia was strikingly inhibited in the DBA strain of mice on a low-cystine diet. Farber showed that similar antileukemic effects could be obtained by folic acid antagonists. Pyridoxine which is essential for the metabolic effects of tryptophane is apparently essential for tumor growth. Kline et al showed a 50 percent reduction in skin tumors produced by methylcholanthrene in pyridoxine deficient mice. Both carcinoma and sarcoma have been shown to be inhibited in experimental animals on a pyridoxine deficient diet, apparently because tryptophane metabolism was thus directly modified (Follis). Biotin, a member of the Vitamin B Complex series, and likewise an atypical amino acid, has been found essential for both normal embryonic and tumor growth. It exerts a procarcinogenetic effect on hepatic tumors produced by the administration of the dyestuff "butter yellow." It has been shown by Loofbourow and others that when tumor tissue is isolated in the Warburg apparatus thyroxine, an amino acid, is one of the few substances which will enhance the metabolism of isolated cells.

Attempts to inhibit tumor-formation by eliminating specific factors from the diet of experimental animals, fails to give clear-cut results because the animals usually suffer from an overall deficient caloric intake. It is more desirable to administer chemical agents which block the action of individual metabolic factors if such agents can be devised. To some extent this has been accomplished for leukemia by the use of glutamic acid conjugates which antagonize folic acid. Similar effects have been claimed for the use of avidin (a derivative of raw egg white) which antagonizes biotin in animal tumors.

It occurred to the authors that through the use of symmetrical double ring organic compounds containing amino groups and carboxy or hydroxy radicals, that a variety of amino acid blocking agents might be devised. There was experimental evidence to indicate that such compounds might be effective. Boyland in 1946 reported that 4, 4' diaminodiphenyl ether and 4, 4' diaminodiphenyl sulfoxide showed cancer inhibitory properties in tumor-bearing mice. However, the compounds were relatively toxic at the therapeutic dose levels. In our study of compounds of this general type, two main groups have been prepared and tested for evaluation as cancer chemotherapeutic agents.

The first of these series of compounds was that of the general formula

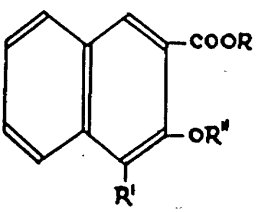


Where R was —C(=O)—; —; —O—; —S(=O)(=O)—

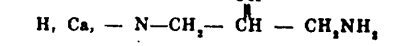
and R' was —C(=O)—N(CH$_3$)$_2$; —C(=O)—N(C$_2$H$_5$)$_2$; —C(=O)—N(C$_4$H$_{11}$)$_2$

The R' substitutions were made by means of the Mannich reaction in our laboratories using an excess of formaldehyde and the amines in order to facilitate complete substitution on the carbons of the benzene rings adjacent to the phenol groups.

The second of these series of compounds was of the general formula



Where R was



H, Ca, — N—CH$_2$— CH — CH$_2$NH$_2$

*Aided by grant from the Geschickter Fund for Medical Research, Inc.

†Abstract in part from the thesis of Jean Scholler to be submitted to the Graduate School of Georgetown University in partial fulfillment of the requirements for the Degree of Doctor of Philosophy.

R" was

and R' was

$$-\text{C}-\text{N}(\text{CH}_3)_2;\ -\text{C}-\text{N}(\text{C}_6\text{H}_{11})_2$$

These products were prepared by the introduction under the Mannich reaction conditions, as in the former series, of the substituted amino alkyl groupings into the 4 position of 3 hydroxy 2 naphthoic acid.

In contrast to the compounds reported by Boyland, the products prepared in the study are in general non-toxic as has been established by acute and chronic toxicity studies in rats.

Several of the compounds described above have been screened for inhibition of appearance and growth of the Rous chicken sarcoma. It has been demonstrated that at a non-toxic dosage level the compounds tested exhibit complete inhibition of tumor appearance for periods ranging up to four months. Tumors appeared in all control animals within 14 days. (Table I.)

To date two compounds have been tested clinically on patients with advanced malignancy. These are derivatives of benzophenone and diphenyl ether (hereafter referred to as benzophenone and benzoether). In all, fifty patients have been treated within the past year. These patients fall into five groups:

1. Epidermoid carcinomas. (Table II)
2. Gastrointestinal carcinomas, including liver and pancreas. (Table III)
3. Mammary carcinomas. (Table IV)
4. Lymphomas, leukemias, and myelomas. (Table V)
5. Miscellaneous melanomas, carcinomas and sarcomas. (Table VI)

Encouraging results have been obtained in some epidermoid carcinomas of the bladder and lung. Nothing dramatic has been seen in carcinomas of this type in the cervix or oral cavity to date. In one case of advanced epidermoid carcinoma of the bladder with invasion of the penis, seminal vesicles and prostate, regression of the tumor involvement and return of the patient to work occurred after several months of treatment with benzophenone and benzoether derivatives. Improvement in this patient continued nine and one-half months, but the patient died one year later. (Fig. 1.)

In advanced carcinomas of the gastrointestinal tract, including the liver and pancreas, beneficial results have been observed in cases of the stomach and pancreas, although in no case was the improvement permanent or beyond several months duration. The relief of pain and increase in appetite and weight were the outstanding features.

In two cases of advanced carcinoma of the pancreas, there was in addition to symptomatic relief a decrease in jaundice. Dramatic improvement with regression of the size of

TABLE I

RESULTS WITH ROUS CHICKEN SARCOMA TREATED WITH THESE COMPOUNDS

Groups[1]	*Amount Inoculated*[2]		*Mg. Compound Per Wing (Pre-Mixed with Tumor Mash or Virus Extract)*	*Tumor Appearance Days After Inoculation*
	Tumor Mash	*Virus Extract*		
Control[3]	75 mg.	None	None	All positive 13 days
Control[4]	75 mg.		None	All positive 15 days
Control[3]		0.3 c.c.	None	All positive 12 days
Control[4]		0.3 c.c.	None	All positive 14 days
Tetra (dimethylaminoethyl)[4] 1, 4' dihydroxybenzophenone	75 mg.		15 mg.	All positive 12 days
	75 mg.		45 mg.	All negative 35 days
		0.3 c.c.	45 mg.	All negative 35 days
Tetra (dimethylaminomethyl)[4] 4, 4' dihydroxydiphenyl ether	75 mg.		15 mg.	All negative 35 days
		0.3 c.c.	15 mg.	All negative 35 days
4 Dimethylaminomethyl[3] 3 hydroxy 2 naphthoic acid	75 mg.		15 mg.[5]	8 negative 4 months[6] 1 positive 4 weeks
	75 mg.		45 mg.[5]	All negative 35 days
		0.3 c.c.	45 mg.[5]	All negative 35 days
4 Dimethylaminomethyl[3] 3 acetoxy 2 naphthoic acid	75 mg.		45 mg.[5]	All negative 35 days
		0.3 c.c.	45 mg.[5]	All negative 35 days

[1]—8 chickens per group, both wings inoculated. [2]—In all cases 0.3 c.c. given. [3]—Solution injected pH 7. [4]—Solution injected pH 4.5. [5]—Suspension. [6]—Only 6 chickens in group. One died natural death, no tumor.

TABLE II

PATIENTS TREATED WITH BENZOPHENONE AND/OR BENZOETHER DERIVATIVES
EPIDERMOID CARCINOMAS

Case	First Date	Age Sex	Symptoms Duration Months	Extent	Treatment Months	Result
15	8-29-50	WM 76	5 mos. hematuria	Bladder, met. prostate, penis	12—Benzophenone & benzoether	Marked improvement 11 mos. Died 9-21-51
16	12- 2-50	WF 53	6 mos. vaginal bleeding	Cervix & adnexa	6½—Benzophenone & benzoether	Relief of pain only Died 6-17-51
17	3-17-51	WF 37	Vaginal discharge dysuria & frequency	Cervix & adnexa	3½—Benzophenone & benzoether	Improvement Rx discontinued 6-19-51
18	12-20-50	WM 47	Cough & hemoptysis 6 mos.	Lung & mediastinal nodes	Benzophenone 11 days	No benefit. Died 1-8-51
19	10-20-50	WM 59	Pain & dyspnea 6 mos.	Lung, mediastinum, met. vertebra	7—Benzophenone	Improvement 6 mos. Died 5-10-51
20	12-10-50	WM 37	Pain & swelling throat 3 mos.	Pharynx, cervical glands, met. vertebra	2—Benzophenone	Improvement 1 mo. Died 3-2-51
21	5- 3-51	WM 48	Swelling angle left mandible 3 mos.	Parotid, met. skull & nodes	1—Benzophenone	No improvement. Rx discontinued
22	6-12-51	WM 72	Leukoplakia 2 yrs.	Floor of mouth & tongue	1—Benzophenone	No improvement. Rx discontinued
23	8- 1-51	WF 73	Pain & swelling neck 1½ yrs.	Tonsil, mediastinum, lymph nodes	1—Benzophenone	Slight improvement 9-8-51

TABLE III

PATIENTS TREATED WITH BENZOPHENONE AND/OR BENZOETHER DERIVATIVES
GASTROINTESTINAL CARCINOMAS INCLUDING LIVER AND PANCREAS

Case	First Date	Age Sex	Symptoms Duration Months	Site & Extent	Treatment Months	Result
24	9- 7-50	WM 60	3 mos. indigestion	Stomach, met. heart	2—Benzophenone	Improved 6 mos. Rx discontinued. Died 4-24-51
25	4- 8-51	WF 78	9 mos. weakness, anemia	Stomach, met. omentum	4—Benzoether & benzophenone	Improved 4 mos. Rx discontinued
26	5-29-51	WM 63	6 mos. indigestion	Colon, met. liver, mesentery	3—Benzophenone	Moderate improvement. Died 8-22-5
27	5-29-51	WM 53	15 mos. indigestion	Rectum, invasion of bladder	2—Benzophenone	Relief of pain only. Died 8-16-51
28	5-21-51	WF 57	1 yr. indigestion	Colon, met. mesentery, liver	1—Benzophenone	No improvement. Died 6-25-51
29	4- 4-51	WF 62	Intestinal obstruction	Colon, met. mesentery	4—Benzophenone	Improved 9-7-51
30	1-10-51	WM 56	Obstruction 2 weeks	Cecum, met. mesentery	2—Benzophenone	Relief of pain only. Died 3-20-51
31	1-15-51	WF 65	Extremis	Rectum, met. liver, lungs	3 days Benzophenone	Died 2-18-51
32	1-25-51	WM 69	2 mos. cough constipation	Rectum, met. liver	1—Benzophenone	No improvement. Died
33	11-21-50	WF 42	3 mos. indigestion, pain	Pancreas, met. liver	3—Benzophenone & benzoether	1 mo. marked improvement. Died 3-15-51
34	12-24-50	WF 73	Indigestion, dizziness 10 mos.	Stomach, extension to lymph nodes & omentum	8—Benzophenone	Improved 9-8-51
35	12-20-50	WM 20	3 yrs. abdominal mass, 3 mos. jaundice	Multiple nodules liver	9—Benzophenone	Marked improvement in jaundice. Shrinkage of tumor 9-7-51
36	8- 9-51	WF 50	1 yr. diarrhea with bleeding	Rectosigmoid, invasion of sacrum	1—Benzophenone	Moderate improvement 9-7-51
37	8-20-51	WM 42	Jaundice, pain	Pancreas, met. liver	1—Benzophenone	Marked improvement 9-6-51

TABLE IV

PATIENTS TREATED WITH BENZOPHENONE AND/OR BENZOETHER DERIVATIVES
MAMMARY CARCINOMA

Case	First Date	Age Sex	Symptoms Duration Months	Extent	Treatment Months	Result
1	12- 2-50	WF 35	Nipple discharge & tumor 14 mos.	Met. to chest wall	8—Benzophenone & benzoether	No improvement. Died 8-10-51
2	5- 1-51	WF 39	Lump right breast 1 mo.	Met. axillary nodes, lungs, chest wall	1½—Benzophenone	Died 6-27-51
3	12-20-50	WF 60	Mass left breast 1 yr.	Met. chest wall, pleura, bones	½—Benzophenone	Some improvement. Died 7-21-51
4	1- 2-51	WF 36	Tumor breast 6 mos.	Met. lymph nodes & thyroid	½—Benzophenone	No improvement. Died 7-15-51
5	8-30-49	WF 52	Lump right breast 1 yr.	Met. lymph nodes, bones, brain	5 days Benzoether	Marked temporary improvement. Died 10-21-49

TABLE V

PATIENTS TREATED WITH BENZOPHENONE AND/OR BENZOETHER DERIVATIVES
LYMPHOMAS, LEUKEMIA AND MYELOMAS

Case	First Date	Age Sex	Symptoms Duration Months	Extent	Months Treatment	Result
6	11- 7-50	WF 47	Lymphadenopathy, weakness 1 yr.	Lymphatic leukemia	10—Benzophenone & benzoether	Improvement 9-8-51
7	2-10-51	WF 27	Vaginal hemorrhage, splenomegaly 1 yr.	Myelogenous leukemia	7—Benzophenone & benzoether	Improved 9-8-51
8	5- 5-51	WM 44	Backache 1 yr.	Multiple myeloma skull & spine	4—Benzophenone & benzoether	Marked improvement 10-1-51
9	5- 7-51	WF 44	Swelling of neck 3 mos.	Ret. sarcoma thyroid	4—Benzophenone	Improvement 9-8-51
10	4-15-51	WF 34	Generalized lymphadenopathy 4 mos.	Ret. sarcoma retroperitoneal & regional nodes	4—Benzophenone & benzoether	Temporary improvement 9-8-51
11	12-20-50	WM 40	Lymphadenopathy 6 mos.	Hodgkin's disease, cervical & axillary nodes	8—Benzophenone & benzoether	Moderate improvement 9-8-51
12	5-14-51	WF 22	Lymphadenopathy 6 mos.	Hodgkin's disease, cervical, mediastinal & inguinal nodes	4—Benzophenone & benzoether	Moderate improvement 9-8-51
13	1- 7-51	WM 32	Lymphadenopathy 1 mo.	Hodgkin's disease, lymph nodes & spleen	8—Benzophenone & benzoether	Steady improvement 9-8-51
14	2- 6-51	WM 42	Fever & lymphadenopathy 9 mos.	Hodgkin's disease, lymph node & vertebra	7—Benzophenone & benzoether	Moderate response 9-8-51
50	8-15-51	WF 24	Lymphadenopathy weakness 3½ yrs.	Hodgkin's disease, lymph nodes & spleen	1—Benzophenone	Improved 9-8-51

TABLE VI

PATIENTS TREATED WITH BENZOPHENONE AND/OR BENZOETHER DERIVATIVES
MELANOMAS, SARCOMAS AND CARCINOMAS

Case	First Date	Age Sex	Symptoms Duration Months	Diagnosis & Extent	Treatment Months	Result
38	10- 3-50	WM 50	Swelling inguinal node following removal of mole from foot 8 mos.	Melanoma of foot with met. to skin, nodes, liver	2 weeks Benzophenone	Some improvement. Refused further therapy. Died 12-29-50
39	11-21-50	WF 50	Melanoma excised right hand 5 mos.	Recurrent melanoma, axillary nodes	9—Benzophenone	Improved 9-8-51

40	4-10-51	WF 39	Tumor left pubic bone 8 mos.	Chondrosarcoma with pulmonary & cerebral metastases	1½—Benzophenone & benzoether	No improvement. Died 5-21-51
41	12-14-50	WM 48	Tumor right groin 7 mos.	Chondrosarcoma, bilateral pulmonary met.	2—Benzophenone	No improvement. Died 2-20-51
42	5-22-51	WM 7	Headaches, ataxia 2 mos.	Medulloblastoma cerebellum, met. spinal cord	1½—Benzophenone	Recovered from moribund state. Died 7-9-51
43	12-20-50	CF 29	Abdominal distention, vomiting 2 weeks	Renal carcinoma, hepatic & skin met.	5 days Benzophenone	Died 12-25-50
44	3-29-51	WM 73	Urinary difficulty 1 yr.	Infiltrating carcinoma prostate	5—Benzophenone	Marked improvement 9-8-51
45	7-15-51	CM 50	Advanced carcinosis	Renal carcinoma	5 days Benzophenone	Died no improvement. Primary tumor necrotic
46	7-31-51	WM 35	Limp, pain, cough	Fibrosarcoma left forearm. Lung met.	1—Benzophenone	Marked improvement
47	7-27-51	WM 37	Pain & swelling scrotum 14 mos.	Embryonal carcinoma testicle, met. retroperitoneal nodes & pleura	1½—Benzophenone	Improvement 1 mo. Died 9-25-51
48	5-31-51	WF 54	Abdominal pain & swelling 10 mos.	Bilateral ovarian carcinoma, met. peritoneum & cervix	4—Benzophenone & ether	Improvement 9-1-51
49	7- 8-51	WM 18	Painful swelling scrotum 10 mos.	Teratoid carcinoma, met. periaortic nodes	2—Benzophenone	Slight improvement 9-7-51

the liver occurred in a malignant hepatoma. Jaundice disappeared and the liver returned to normal size on intramuscular therapy and the patient was able to go home on leave. Improvement lasted four months with a gradual return of jaundice and hepatomegaly. Therapy was again begun intensively with five intravenous injections and the patient is again improved. In advanced carcinomas of the large bowel and rectum prolongation of life and some symptomatic relief has been observed, but striking improvement as seen in primary carcinomas of the stomach, liver or pancreas has not occurred. (Figures 2 & 3.) It is our impression that the upper portion of the gastrointestinal tract with its accessory digestive organs responds more favorably than the lower gastrointestinal tract.

The treatment of advanced mammary carcinoma with metastasis to the skin lung or bone was carried out in five cases without any signs of benefit, except for a short while in one case with cerebral metastases.

Among the lymphomas, leukemias and myelomas improvement has been observed, the most striking result being obtained in a case of multiple myeloma, in which there was improvement in the uremia, anemia and pain. The patient, a physician, is still under treatment and continues to improve after five months of treatment. (Figure 4.) Decrease in the blood count in chronic myelogenous leukemias has been observed with benzoether, but not with benzophenone. This improvement, however proved temporary. A reticulum cell sarcoma of the thyroid showed regression of the swelling, but continued improvement was not observed after three months. (Figure 5.)

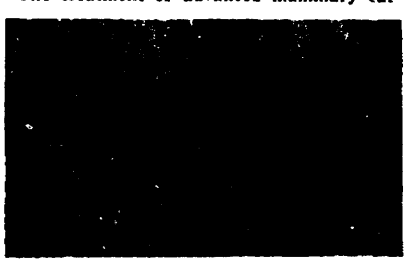


Figure 1—Case 15. Patient of Dr. Lloyd Lewis. A 76-year-old man with extensive carcinoma of the bladder involving the seminal vesicles, prostate and penis. The patient has been on benzophenone and benzoether therapy for 12 months. At the time therapy was instituted in August 1950 the patient was bedridden. He returned to active life for 10 months and is dead, one year later.

Figure 2—Case 34. A case of extensive carcinoma of the stomach with clinical improvement which has continued on 8 months of benzophenone therapy.

Figures 3A & B—Low and Medium power—Case 29. Patient of General Sam Seeley and General Wallace H. Graham treated at Walter Reed Army Hospital. A woman of 62 with recurrent adenocarcinoma of the ileum and cecum following resection for carcinoma of the sigmoid performed in February 1949. Seventy-two hours prior to the second operation the patient was given intravenous benzophenone. The photomicrograph shows a part of an area of central necrosis produced by the compound in a mesenteric metasis. The patient has been maintained for the past six months on benzophenone therapy.

A number of miscellaneous types of advanced malignancies are tabulated in Table VI which includes two melanomas, two chondrosarcomas, a fibrosarcoma, a medulloblastoma of the cerebellum, two renal carcinomas, a carcinoma of the prostate, two malignant tumors of the testes, and one carcinoma of the ovary.

No measurable improvement was found in the cases of chondrosarcoma. No clinical improvement was noted in the two renal carcinomas, but both were terminal and both showed extensive necrosis of the tumor at autopsy which may or may not have been the result of the therapeutic agent. Improvement was noted in the cases of melanoma although the first case treated refused further therapy after two weeks. This refusal was precipitated by an attempt to inject directly one of the metastatic nodules. A teratocarcinoma and an embryonal carcinoma of the testis are still under treatment. Both are terminal cases with extensive metastases. Clinical improvement occurred in the case of embryonal carcinoma, who died in 6 weeks but measurable improvement has not occurred in the case of teratocarcinoma. (Figure 6.) One case of carcinoma of the prostate has done well but extensive metastases were not present at the time treatment was instituted. A fibrosarcoma of the forearm in a 35-year-old man which had three previous local excisions in November and December 1950 followed by amputation in January 1951 was treated for extensive pulmonary metastases with prompt symtomatic improvement. He became ambulatory. A boy of 7 with recurrent medulloblastoma of the cerebellum with extension of the tumor to the spinal cord recovered from a moribund condition for a period of one month. This was followed by relapse and death.

To date it has not been possible to explore the effectiveness of these compounds on all varieties of malignancy and the series is not large enough to draw conclusions in regard to the effectiveness of the compounds for any particular type of carcinoma or sarcoma. It is possible, however, to report encouraging results in isolated cases of carcinoma of the bladder, lung, liver, pancreas and stomach, although the effects have been temporary. The results obtained in one case of multiple myeloma and in one case of reticulum cell sarcoma have also proved encouraging. In one case of ovarian carcinoma with extension to the pelvic peritoneum and cervic moderate improvement has occurred.

Figure 4—Case 8. A 44-year old physician with extensive multiple myeloma under benzophenone therapy for four months. The patient was in uremia and severely anemic when therapy was instituted. The patient is now ambulatory. The N.P.N. has fallen from 140 to 60 mg.%.

Figure 5—Case 9. Patient of Dr. T. F. Kellher. A 44-year-old woman with reticulum cell sarcoma of the thyroid which has shown regression on benzophenone therapy for four months.

Figure 6—Case 47. Patient of Dr. Wm. B. Walsh and Dr. Edward E. Ferguson. A man of 37 with an embryonal carcinoma of the testicle of 14 months duration with metastases to the retroperitoneal nodes and pleura. Clinical improvement has been maintained for 1½ months on benzophenone therapy. The patient died 2 months later.

Both the benzophenone and benzoether have been prepared for injection in aqueous solution in the strength of 150 to 200 mg./c.c. Initially, two grams of the material is diluted in 250 or 500 c.c. of 5% glucose and administered intravenously as a drip over a period of two to three hours, once daily for the first five days. Thereafter 300 mg. of the material is given intramuscularly once daily. When the patients leave the clinic this intramuscular injection is reduced to three times weekly. In some cases after two months of treatment with benzophenone the patients are switched to benzoether for two weeks or longer and then back to benzophenone. Oral administration has not been attempted because of the small amount of material available.

CONCLUSIONS: At the present writing, on the basis of animal and clinical investigations, the following conclusions appear justified:

1. The amine-substituted diphenolic compounds of the benzophenone and benzoether class are relatively nontoxic, are highly water-soluble, and can be administered in doses of one to several grams daily intramuscularly or intravenously to patients without untoward effect.

2. These compounds exert a marked inhibitory action on Rous chicken sarcoma.

3. Some anti-cancer effect can also be demonstrated clinically in malignancies of the urinary tract, the gastrointestinal tract, and in malignancies of the lymphoma-leukemic and myelomatous group. Encouraging results have also been obtained in some gonadal malignancies.

4. The localization of these compounds in the tissues and the mechanism of their action remain to be investigated. The diphenyl derivative resembles closely in its structural formula, the amino acid thyroxine. The benzophenone derivative resembles somewhat in its structural formula the synthetic hormone, diethyl stilbestrol reported by Dodds et al. Practically no animal experimentation has been done on the nitrogen-containing derivatives of steroid hormones but two recent publications (Blanchard et al, and Popovici et al) suggest that they may exert an endocrine effect through pituitary stimulation. These possible physiological attributes of the compounds under discussion remain to be investigated.

ACKNOWLEDGMENTS: The authors wish to acknowledge the cooperation of Drs. T. F. Keliher, Lloyd Lewis, Joseph J. McCarthy, William B. Walsh, Antonia Popovici and the members of the Resident Staff of the Georgetown University Medical Center in carrying out therapy on the patients at the Georgetown University Medical Center. They also wish to express their indebtedness to General Sam Seeley and General Wallace H. Graham for their cooperation in treating a group of cases at the Army Medical Center in the Walter Reed Army Hospital. They also wish to thank Drs. E. Emmet Reid and Martin Rubin who acted as consultants in the problems of chemical synthesis.

BIBLIOGRAPHY

1. Bischoff, F., Ingraham, L.P., & Rupp, J.J.: Influence of Vitamine B^c and Panthothenic Acid on Growth of Sarcoma 180. Arch. Path. 35: 713, 1943.
2. Blanchard, K.C., Dearborn, E. H., Marken, T.H., & Marshall, E.K., Jr.: Stimulation of the Anterior Pituitary by Certain Cinchoninic Acid Derivatives. Bull. Johns Hopkins Hosp., 86: 83, February 1950.
3. Boyland, E.: Experiments on the Chemotherapy of Cancer. Biochem. J. 40: 55, 1946.
4. Dodds, E.C. & Lawson, W.: Molecular Structure in Relation to Estrogenic Activity. Compounds without a Phenanthrene Nucleus. Proc. Royal Soc. of London 125 222, 1938, Series B.
5. Farber, Sidney: Some Observations on the Effect of Folic Acid Antagonists on Acute Leukemia and Other Forms of Incurable Cancer. Blood, J. of Hematology, 160, IV, No. 3, February 1949.
6. Follis, Richard H.: The Pathology of Nutritional Disease, Page 191, Charles C. Thomas, Springfield, Ill., 1948.
7. Greene and Lund: The Heterologous Transplantation of Human Cancers. Cancer Research 4: 352-363, 1944.
8. Harrow, B.: Textbook of Biochemistry, Page 175, 3rd. Ed., W. B. Saunders Co., Philadelphia, 1943.
8A. Hertz, R.: Biotin and the Avidin-Biotin Complex. Physiol. Rev. 28, No. 4, 479, Oct. 1946.
9. Kline, B. E., Rusch, H.P., Bauman, C.A. and Lavik, P.S.: The Effect of Pyridoxine on Tumor Growth. Cancer Research 3:825-829, 15 .3.
10. Loofbourow, J.R.: Intercellular Hormones. Biochem. J. 36:831, 737, 1942.
11. Popovici, A., Rubin, M. and Geschickter, C F.: Gonadal Stimulation by Some Nitrogen Compounds. Bull. Georgetown Univ. Med. Center 4: 166, 1951.
12. Tannenbaum, A.: The Dependence of Tumor Formation on the Degree of Caloric Restriction. Cancer Research 5: 609, 1934.
13. White, F.R., White, J., Mider, G.B., Kelly, M.G., and Heston, W.E.: Effect of Caloric Restriction on Mammary-Tumor Formation in Strain C3H Mice and on the Response of Strain DBA to Painting with Methylcholanthrene. Natl. Can. Inst. J. 5: 43-48, 1944.

Dr. GESCHICKTER. I was using anticancer drugs at Georgetown, and we had published on this in 1951, the CIA had come to this reprint through other means that I know not of.

One of the compounds, which is benzoether, was listed in the antimalarial programs undertaken during the war. One of these was very similar to our product, and in the antimalarial report, three volumes, this particular group of compounds had some, should I say, disturbing effects on the nervous system of the patients, that was submitted to this antimalarial drug under the antimalarial program, and this is so reported in those three volumes. This is how they came to be interested in this group of compounds.

Senator KENNEDY. How many years were you involved with the CIA?

Dr. GESCHICKTER. They say 13 years. The number of years that we were giving money to other universities was about 9 or 10; 13 years is the major part. It tailed off so that a number of the years were added to that subsequent to handling this money that went to other universities.

Senator KENNEDY. Your personal involvement was over what period of time?

Dr. GESCHICKTER. It was from late 1953 until 1972.

Senator KENNEDY. And were all the resources that were coming through your medical foundation at that time for cancer research?

Dr. GESCHICKTER. No. As I pointed out, the Geschickter Fund is not for cancer research. The Geschickter Fund reads Geschickter Fund for Medical Research, and it is applied to chronic diseases.

Senator KENNEDY. So the funding of some of these programs was not solely for cancer, is that correct?

Dr. GESCHICKTER. Correct.

Senator KENNEDY. Could any of the work that you supported, have been done by NIH if they wanted to?

Dr. GESCHICKTER. The NIH has a billion dollar budget——

Senator KENNEDY. More than that now.

Dr. GESCHICKTER. And what they do with it is unpredictable. When you get a grant from there, they want a report within 3 months before you can get the next one. So it is not a feasible way of doing this sort of research.

Senator KENNEDY. But the point is the research that you were doing could have been done or supported by the National Institutes of Health, is that correct?

Dr. GESCHICKTER. Certainly they have the facilities and the money to have done it.

Senator KENNEDY. So none of the work you were doing or supporting on that kind of thing was secret or covert in that sense?

Dr. GESCHICKTER. All has been published.

Senator KENNEDY. Now, if we could get into a specific project, the MK-ULTRA Subproject 23.

As I understand the purpose of this project, it was to synthesize new drugs and modify old ones to determine their effectiveness in modifying behavior and function of the central nervous system. This included animal tests and tests on terminally ill cancer patients.

In an August 25, 1955, memorandum for the record, an authorization was given for the contractor, ostensibly you, to pay the hospital expenses of certain persons suffering from incurable cancer for the

privilege of studying the effects of these chemicals during their terminal illness.

Is that corect?

Dr. GESCHICKTER. No, sir. Absolutely incorrect.

Senator KENNEDY. Well, are you familiar with this document [indicating]?

Dr. GESCHICKTER. I have it in my hand.

I want to show you something peculiar about it if you will look at it. You will see that they pull out $658.05 out of expenditures that were made in 1954. That $658.05 went into the Georgetown Hospital pharmacy for drugs used by my assistants in the animal house. Now, watch the peculiarity. They come along on the 25th day of August 1955, and issue a specific directive for $658.05. Now, we are using hundreds of thousands of dollars which they imply are going to patient research, and the only thing they can come up with is a separate and new voucher for $658.05 a year later, after the project has been completed and paid for.

Senator KENNEDY. Why are they doing this? Are there other records that are simply mistaken?

Dr. GESCHICKTER. Absolutely.

Senator KENNEDY. Tell us a little bit about that.

Dr. GESCHICKTER. I have a record, which was a very foolish record, the way they put it down——

Senator KENNEDY. Who is they?

Dr. GESCHICKTER. They?

Senator KENNEDY. Yes.

Dr. GESCHICKTER. You are talking about MK-ULTRA project. I do not know who "they" are.

Senator KENNEDY. All right.

Do you know who the people are?

Dr. GESCHICKTER. I do not know all of them.

Senator KENNEDY. Well, Mr. Bortner, do you know him?

Dr. GESCHICKTER. I knew Mr. Bortner. That was the man I saw most frequently.

Senator KENNEDY. As I understand it, he was the one who signed these documents.

Dr. GESCHICKTER. He signed this one.

Senator KENNEDY. Certainly you are familiar with Mr. Bortner who signed these. Let us go back to the other question about whether you have other records which are inadequate as well.

Dr. GESCHICKTER. I have a record of $1,000 charged to patient care at Georgetown under the MK-ULTRA project. This is at the date of March 1957, there is a copy of a check on our private funds for $1,000.

Do you have that record there?

Senator KENNEDY. Yes.

Dr. GESCHICKTER. In September there is $250 charged to surgeon's fee.

Senator KENNEDY. I believe we have those records here. We have all the records because the staff went over those with you

I think we want to make a particular comment on that. I think we have that one and we also have another one dated October 8, 1954 that said:

> Due to a considerable increase in the scope of the work under Dr. Geschickter at the direction of the SSCD, which is CIA, under Subproject 23, Project MK-ULTRA, the $42,700 sum originally obligated for this work is insufficient. It is therefore proposed $15,000 to that already obligated under this subproject.

You are familiar with that?

Dr. GESCHICKTER. Yes.

Senator KENNEDY. Is that accurate?

Dr. GESCHICKTER. That is accurate. We do not account for that $1,250 on that.

Senator KENNEDY. Did you do the work?

Did you do that work described in that project.

Dr. GESCHICKTER. Yes. But, Senator, we were talking about patients in the hospital. I want to make that clear. Now, we are jumping to this general laboratory work on animals.

Senator KENNEDY. I think the point that we are interested in, or at least one of the points we are interested in is not so much the bookkeeping aspects, although we do want to examine those to the extent that they are important, but the——

Dr. GESCHICKTER. They are crucial, Senator.

Senator KENNEDY. OK.

But, as I understand, they are inaccurate.

Dr. GESCHICKTER. Not accurate, sir.

Senator KENNEDY. You tel us about it.

Dr. GESCHICKTER. The inaccuracy applies to patients.

Senator KENNEDY. Tell us about it.

Dr GESCHICKTER. Well, I will. We are concerned here with laboratory studies done exclusively on animals. We are then going over to $1,250 ascribed to hospitalization, of an advanced cancer patient, and so icited in your report, and this patient that we contributed $1,000—well, it was a case of abdominal aneurysm, he was not seen by me as a pat ent, I referred him to the surgeon—I never administered to him—he was operated on, and if they want to sneak that patient in as advanced cancer case, they should never put the $250 on top of it because I could recognize the surgeon from it. His low fee was a courtesy to me.

Senator KENNEDY. It is basically inaccurate? Is it inaccurate or accurate?

Dr. GESCHICKTER. It is inaccurate.

Senator KENNEDY. Now, do you have any idea why they did that?

Dr. GESCHICKTER. I do not know what they were thinking of.

Senator KENNEDY. Why would they put that kind of information in?

Dr. GESCHICKTER. They were trying to make sure in their own records that they had some breakthrough on clinical grounds so they put in anything clinical they could lay their hands on. They put the money on the wrong patient that time.

Senator KENNEDY. Even with regard to the particular case you have described, it is not accurate?

Dr. GESCHICKTER. It is not accurate at all.

Senator KENNEDY. Now, turn to subproject 35. This involves the intention of the Agency to construct a new research wing at the Georgetown University Hospital using the Geschickter Foundation as a cutout for channeling CIA money for the project.

Georgetown University was to be unwitting of CIA interest, and CIA's interest was to provide the Agency with the equivalent of a hospital safehouse for doing research. The plans for this project were approved by the Director of the Central Intelligence Agency.

In this approval document of November 15, 1954, the memo says that Agency-sponsored research projects in sensitive fields would be carried out—I suppose it is important to note that it says "would be carried out"—in the new wing of the hospital.

The Agency's contribution to the hospital would be a nonrecurring grant of $125,000. And the Agency was to encourage the Atomic Energy Commission to make a similar contribution.

The document describes the background of the relationship of the Geschickter Fund for medical research and the CIA, and it describes the background of Dr. Geschickter and the contributions to be made by the CIA and by the Geschickter Fund.

Their plans included integrating at least three Chemical Division employees into the new hospital wing to work on the Agency's research projects. It talks about three Chemical Division employees and how they are going to put those employees into the new wing of the hospital. It was anticipated that one-sixth of the total space in the new research wing would be available to Dr. Geschickter and, in turn, would be available to the CIA. Indeed, the CIA referred to this as the equivalent of a hospital safehouse.

Then, on April 6, 1955, it became clear that the Atomic Energy Commission would not participate in giving money, and so the Agency proposed to double its contribution. In the latter document of April 6, 1955, the CIA states that they will no longer have to wait until the new wing is built in order to take advantage of the research facility. This was because you, Dr. Geschickter, were to be allowed to use existing space in the present hospital in order to build up an organization that would later occupy the new wing, and the CIA claims, and I quote, "This means that we will be able to begin to take advantage of this cover situation within a matter of months instead of waiting for a year and a half."

So, did you give CIA money to Georgetown University Hospital for construction of a new research wing?

Dr. GESCHICKTER. In 1957, I gave some money to the building fund of Georgetown University Medical Center. I never gave them a penny for any particular building.

Senator KENNEDY. So you did not have the money for that?

Dr. GESCHICKTER. No, sir, I did not.

The Geschickter Fund was giving it anyhow. I never had the money.

Senator KENNEDY. Well, you have this document in front of you about the memorandum of January 10, 1956, that talks about Subproject 35 was finally completed on December 9, 1957. Total funds made available $515,000. So they spent a half a million dollars they said they would spend to build the wing.

Now, did the Geschickter Fund pass the money?

Dr. GESCHICKTER. No; we never passed that sum of money, Senator.

Senator KENNEDY. Well, did you pass any money?

Dr. GESCHICKTER. $375,000, not $515,000.

Senator KENNEDY. So what was the Agency's contribution?

Dr. GESCHICKTER. It could be anything because I do not know what their records showed.

Senator KENNEDY. But through the Geschickter Fund, was it the $375,000——

Dr. GESCHICKTER. $375,000 given in 1957.

Senator KENNEDY. And can you tell us whether that was the CIA funds or how much of that was CIA funds?

Dr. GESCHICKTER. That was CIA money, as it turned out later. At the time in 1955 we did not know whether the AEC was involved or not, or whether some other foundation was there.

Senator KENNEDY. But that was CIA money?

Dr. GESCHICKTER. It turned out to be $375,000 CIA money.

Senator KENNEDY. Why would they invest this money? Do you have any idea why they wanted to invest it?

Dr. GESCHICKTER. I have not the slightest idea because I never saw any of that memo or that so-called Project 35 until about Saturday. It was the first time I had ever laid eyes on it. That is about 80 hours ago.

Senator KENNEDY. Did you ever get in return one-sixth of the hospital wing?

Dr. GESCHICKTER. Not at all.

Senator KENNEDY. Did you conduct research——

Dr. GESCHICKTER. Not a bit in this building. I was still in the animal house in the Department of Pathology where I had been since 1946.

Senator KENNEDY. So you never got any—at least you never did any research, and none of the research that was done under your guise, and you have no idea as to what the followup was?

Dr. GESCHICKTER. I have no idea what their plan was for giving the money.

Senator KENNEDY. And even though the documents all relate to you and indicate what you are going to do in terms of the research——

Dr. GESCHICKTER. As in "The Man From La Mancha," as far as I am concerned, I know not of what they were thinking.

Senator KENNEDY. They are not accurate then either in their portrayal of what they said you were going to do?

Dr. GESCHICKTER. Senator, if you go to that building, the top floor that they say they would occupy is 50 percent mechanical equipment for air-conditioners.

Senator KENNEDY. You did not know what the agency got out from all that money that they put in? You have no idea?

Dr. GESCHICKTER. No idea.

Senator KENNEDY. Did you perform any other research for testing drugs, gadgets, or any research at all on human subjects?

Dr. GESCHICKTER. Are you referring to research in that particular building?

Senator KENNEDY. No. Any other.

Dr. GESCHICKTER. I did my usual research every year, discovering the cause of cancer, a new treatment for cancer, a new treatment for asthma, a new treatment for hypertension, and new insights into arthritis.

Senator KENNEDY. Did the CIA sponsor that research?

Dr. GESCHICKTER. They sponsored it along with the other contributors.

Senator KENNEDY. Why were they interested in all of these?

Dr. GESCHICKTER. They had money but they did not have ideas.

Senator KENNEDY. What did they speak to you about in terms of cancer? What were the other diseases, arthritis?

Dr. GESCHICKTER. High blood pressure, arthritis, asthma, and cancer.

Senator KENNEDY. Could you see any connection between that and the national security-covert intelligence?

Dr. GESCHICKTER. All I can say is any understanding of the way the body works and how chemicals work or pharmaceuticals or drugs work is important for any agency in the Government to know.

I have a reprint here that will be made available.

Senator KENNEDY. What do you have?

Dr. GESCHICKTER. I have a reprint here on the hypersensitivity phenomenon produced by stress by Charles Geschickter and Edward O'Malley, published and submitted for publication in 1959.

Senator KENNEDY. Is this Subproject 45?

Dr. GESCHICKTER. This is 45.

Senator KENNEDY. If I could make a brief comment about that.

According to the CIA, during the period of 1955 to 1963, you were trying to identify and evaluate substances which might have applications in the field of the psychochemical and knockout drops. This was also supposed to involve, first, the testing of drugs on advanced cancer patients, and then on appropriate patients.

This is the project that involved into a study of stress. The CIA was supposed to have contributed approximately $600,000 over that period of time in support of this project. Apparently, in order to cover the CIA's purpose of being involved in this project, on January 30, 1956, a CIA memo says——

Dr. GESCHICKTER. The project of stress that they referred to was done entirely on rats and so reported.

Senator KENNEDY. Now, in the memo it says:

> In order to continue the established cover activities in the Fund and to make available a pool of subjects for testing purposes, the cardiovascular and anti-carcinogenic effects of compounds resulting from the above program will be evaluated.

Now, it would seem to me in the health area that what you are basically talking about in this situation is where you are completely mixing what would be legitimate kinds of research—that is, testing cardiovascular and anticarcinogenic effects of compounds—in order to cover the real purposes.

Dr. GESCHICKTER. I was not covering anything.

Senator KENNEDY. No, no. This is what I am quoting in the memorandum—I am not saying that you were. I am quoting the CIA memo that indicates that that is what their understanding of the nature was.

What do you say about that? Is that an accurate description?

Dr. GESCHICKTER. No. They were looking on anybody's work in my laboratory or any other of 86 universities for anything they could find in that field. But I did not know what they were looking for.

Senator KENNEDY. What field is this now?

In what field is this? You are talking about stress now?

Dr. GESCHICKTER. Stress. We are talking about stress.

Senator KENNEDY. That is subproject 45, is that correct?

Dr. GESCHICKTER. Yes.

Senator KENNEDY. There were a series of annual renewals of this project?

Dr. GESCHICKTER. Correct.

Senator KENNEDY. In each one of them there were summaries of what was accomplished and what was hoped to be accomplished.

On the January 17, 1957, draft, they talk about synthesizing and the clinical evaluation of compounds known to have application in the psychochemical and K-fields. In addition, natural toxic psychoses were to be studied. These included compounds lowering blood glucose, compounds to be administered by all routes.

Do you remember this research?

Dr. GESCHICKTER. I have a list of the compounds and that research applies to thiogycolic acid submitted to the NCI, and I will give you their number for it. I remember the research very well, Senator. Cancer code number is 59–2–79, it is an anticancer compound and not a psychotic knockout drug.

Senator KENNEDY. Now, in January 1959, in the next renewal of this project, the following goals are enumerated by the CIA. And it talks about development of materials and techniques for the production of maximum levels of physical and emotional stress in human beings. And then it continues, development of material and techniques which produce a maximum attenuation of stress in human beings once it has been produced. It continues along. It indicates you are going to do it.

Dr. GESCHICKTER. This refers to continuation of rat studies of stress and these other chemicals that produce stress and phenomena in rats, and they have been published.

Senator KENNEDY. Were any of these tests done on human subjects?

Dr. GESCHICKTER. No, sir.

Senator KENNEDY. Well, it indicates that that is what they made the grant in order——

Dr. GESCHICKTER. Can I correct you on that, Senator?

The cancer compounds were given to patients under that NCI number, and they have been reported to the Tumor Board at Georgetown. They are looking for its effects on blood sugar and on stress, but the compounds that we used were modified to cure cancer, and they were so modified that they would show up as anticancer drug at the NCI, and that is what they did.

But we were not giving our patients stress drugs.

Senator KENNEDY. All right.

Now, in the continuation of this project, the funding for this particular project, on the 29th of December, 1959, the memo will obviously be part of the record, but let me read you the relevant part:

"As in indicated in the attached proposal, which is the proposal for the next year, work of the past year has progressed to the point where more definitive experiments on stress reaction can be carried out.

Primarily this is brought about by the characterization of several new materials which produce reactions in humans and the application of some new clinical methods of measuring the extent of disturbance produced."

Now, as I understand, this is the internal document that would justify the expenditures for the next year. But you say that that is not accurate, that that aspect is not accurate?

Dr. GESCHICKTER. Those materials, Senator, have to be cortisone and adrenalin, and we had discovered that they work uniquely in combination. Now, those materials, Senator, are standard—cortisone is standard treatment for lymphosarcoma and for Hodgkin's disease, and our studies in that field would define the side effects in cancer patients who were getting cortisone as approved treatment, and adrenalin at times.

Senator KENNEDY. Well, that is not terribly dramatic then, is it? It is important but not dramatic.

Why do you think the agency is attempting to dramatize this?

Dr. GESCHICKTER. I could not answer that, except they were tremendously dogged in maintaining connections with Georgetown and, remember, all through this period we were distributing hundreds of thousands of dollars to other universities, and they did not want to lose that either.

Senator KENNEDY. Why is this all sort of kept in the black box, so to speak? If this is legitimate, valuable, useful, and worthwhile, why is it all couched in——

Dr. GESCHICKTER. Senators, the amazing thing to me is what is in that black box. Some of what was in that black box was available on open market, and they were trying to synthesize it secretly.

Senator KENNEDY. They paid $600,000 for this type of research. Why, if it is available in the open market—why are they channeling it through the agency?

Dr. GESCHICKTER. I have not the slightest idea. I can just quote you a $32,000 grant to another institution to synthesize a drug that was in French pharmacopea, and I bought it for $220 a pound.

Senator KENNEDY. How much went to the Geschickter Fund over these years totally, approximately?

Dr. GESCHICKTER. Project 45—I can tell you exactly, $535,000.

Senator KENNEDY. For all projects?

Dr. GESCHICKTER. For all projects that went to us for research, the expense, the total amount was $655,500. Total building program expense was $375,000, and that is total amount.

Senator KENNEDY. For the 13 years, what would be the total of it approximately?

Dr. GESCHICKTER. That is approximately the total for those years.

Senator KENNEDY. All the years, all projects.

Dr. GESCHICKTER. All projects?

Senator KENNEDY. If you totaled all the projects that were funded through the Geschickter Foundation for the universities in those 13 years, what is the total?

Dr. GESCHICKTER. This figure is the $1 million that went to Georgetown, a little over that.

Senator KENNEDY. Total amount, a little over $1 million is all?

Dr. GESCHICKTER. Yes, $1,030,000——

Senator KENNEDY. Is that not just Georgetown?

Dr. GESCHICKTER. That was spent at Georgetown.

Senator KENNEDY. I want the total amount for the 13 years, all CIA money for any purpose that went through the foundation.

Dr. GESCHICKTER. That went through the foundation?

Senator KENNEDY. Yes, approximately.

Dr. GESCHICKTER. I will give it to you exactly.

Senator KENNEDY. Give it to us exactly.

Dr. GESCHICKTER. $2,088,600, to other institutions.

Senator SCHWEIKER. Does that figure represent operating or capital or construction funds?

Dr. GESCHICKTER. These are all operational funds distributed to the universities and all other projects I have listed by the Geschickter Fund independently of the Georgetown University Medical Center.

Senator KENNEDY. What would you say they got from that?

Dr. GESCHICKTER. What did they get from it?

Senator KENNEDY. Yes.

Dr. GESCHICKTER. I would like to read you what they got from it. I would like to clear this up.

In the first place, they did soil research, and they spent $300,000 for soil research at three universities. That soil research has been used and is still being tried out to convert shale to oil by bacterial action. They found 57 substances would increase the growth of those bacterias to attack shale. That is one thing that might——

Senator KENNEDY. Does it seem peculiar to you that the Central Intelligence Agency is funding that kind of research, whether these things are valuable or useful or not?

Dr. GESCHICKTER. Senator, this is what came out of the black box.

Senator KENNEDY. Now, just in a general kind of comment, would you say that there may have been some useful and important research?

Dr. GESCHICKTER. More good than evil.

Senator KENNEDY. As I understand it, there was nothing or at least from what you indicated here, there was nothing that was done or channeled through your foundation that could not have been supported by other instruments of government, am I correct?

Dr. GESCHICKTER. Money wherever you put it, and that is what they were doing, spending their money, is well spent on research.

Senator SCHWEIKER. We struck oil in the black box, is that what you are trying to tell us?

Dr GESCHICKTER. We struck oil. That is one thing that came out of it.

Senator KENNEDY. Yet, even in the explanations, and even in the internal documents that describe the work, in some instances, as it related to personal records, those were inaccurate, am I correct in that?

Dr. GESCHICKTER. They were inaccurate.

Senator KENNEDY. Do you have any understanding of why they would be so inaccurate?

Dr. GESCHICKTER. No, except that I know the amounts were inaccurate.

Senator KENNEDY. Did it occur to you they might be using funds that had been described in those expenditures for perhaps other purposes?

Dr. GESCHICKTER. I do not know.

Senator KENNEDY. You do not know.

Second, in terms of the characterization of the work, you are aware of really the dramatization of a number of the research projects that you were involved in. You have no insight or understanding of why they might have been either over-dramatized or overstated?

Dr. GESCHICKTER. I do not know why they were overdramatized.

Mr. CACHERIS. I will speak for the record.

Dr. Geschickter first learned of these documents through the courtesy of your staff Friday afternoon and Saturday morning. It was the first time he had seen them, the characterizations of them.

Senator KENNEDY. He has been very cooperative. All of you have in helping the committee. It is not easy to follow all the lines, where they have been leading. But you have been very helpful to us.

Now, the records of MK-ACTION indicate that although the use of the Geschickter Foundation for Medical Research would no longer be used as conduit, you were still to be used as conduit to handle grants to other researchers through separate commercial accounts. It also says that in the past you have been used as a grantee for specific research activity and as a channel for funding other medical researchers, and as the provider of cover for one staff member of the CIA.

Is all of that accurate?

Dr. GESCHICKTER. That is accurate.

Senator KENNEDY. Who was the staff member? You do not have to give us the name, but where did he work? Can you tell us?

Dr. GESCHICKTER. I do not know where these people work at the present time. This was long ago. Where they worked then?

Senator KENNEDY. Yes.

Dr. GESCHICKTER. I would like to hear the question. I do not know what people you are referring to.

Senator KENNEDY. Was the NIH involved in any of the research projects?

Dr. GESCHICKTER. There was NIH involvement.

Senator KENNEDY. Could you tell us the nature of that involvement?

Dr. GESCHICKTER. I can tell you the nature of it accurately. One was on studies on concussion in which they rocked the heads of animals back and forth to try to cause them amnesia by concussion of the brain. And that was for $110,000.

The other, which was funded through this later business was the use of radar to put monkeys to sleep, to see if they could be, should I say, instead of Mickey Finn, they could put them under with radar directed toward the monkey brain.

Senator SCHWEIKER. Could they?

Dr. GESCHICKTER. Did they go to sleep?

Senator SCHWEIKER. Yes.

Dr. GESCHICKTER. Yes, sir. But, Senator, it showed if you got into too deep a sleep, you injured the heat center of the brain the way you cook meat, and there was a borderline there that made it dangerous.

Senator KENNEDY. Now, there is a discussion also in the memoranda as to how to hide contributions so that no additional taxes would be paid by you. There is no indication of any wrongdoing obviously on your part. I think all of us understand that in terms of the protection

of various kinds of agents that there may have to be some procedures which are established to protect their cover.

But, in this memorandum, it mentioned examinations of Dr. Geschickter's—saying if this were the case, the nature of this transaction would arouse suspicion under cursory IRS examination. Then it continues, talking about the Foundation:

> Such an investigation could undoubtedly be handled by intercession with the IRS. The need for such intercession should, however, be avoided.

It would certainly indicate that it appears that the ability to intercede with regard to the IRS was certainly a working tool of the agency itself.

Can you tell us about what MK–ACTION, what was MK–ACTION?

Dr. GESCHICKTER. I first heard about it on Saturday. But the answer is they were looking for a new way to hide things, and that is all I can tell you about it.

Senator KENNEDY. Were you involved in any research under that project?

Dr. GESCHICKTER. I was involved in research, no matter how it came, it went to the Geschickter Fund and to the same laboratories.

Senator KENNEDY. Was that research covert?

Dr. GESCHICKTER. No, sir, it might be, it might not. It depends on how you look at it.

At the same time, it was covert.

Senator KENNEDY. Well, do you want to, just briefly, tell us about that?

Dr. GESCHICKTER. Among other things I tested all the rocket fuels that were in use for toxicity, and they were all of a certain type of halogen derivatives related to chlorine we drink in water and the fluorides that we use in toothpaste to strengthen teeth. I found out that these fluorides and these chlorines and these rocket fuels were all excreted through the lungs and were damaging to the lungs, so it is possible that one of the agents of cancer of the lung is not just tobacco, it may be the chlorination of our water.

Senator SCHWEIKER. Does that come from the formation of chloroform after chlorine is put into the water and ingested?

Dr. GESCHICKTER. It is metabolized and all of these halogens are excreted through the lungs, this is what I proved, whether——

Senator SCHWEIKER. Are you saying you do not agree with EPA's finding that the amounts of chlorine in water today are safe? You are saying they are not safe?

Dr. GESCHICKTER. We do not know over a long period of time. This is a terrible thing about cancer, Senator. It is like a national policy. You think it is good today and, 20 years later, you might be wrong.

Senator KENNEDY. Just finally, the Agency funneled money to many universities through the Geschickter Fund, did it not?

Dr. GESCHICKTER. Yes, sir.

Senator KENNEDY. Do you have the list of all of those universities?

Dr. GESCHICKTER. All of them.

Senator KENNEDY. In general, did the universities know that the money was coming from the CIA?

Dr. GESCHICKTER. Some of them had previously gotten CIA money, and they just switched this method of giving it to them. In general, they did not know.

Senator KENNEDY. Did or did not know?

Dr. GESCHICKTER. In general, did not know. Some of the universities undoubtedly knew it, in my opinion.

Senator KENNEDY. As a researcher, what is your own reaction to the covert funding of university research in terms of the universities?

Dr. GESCHICKTER. I do not believe in it.

Senator KENNEDY. Pardon?

Dr. GESCHICKTER. I do not believe in covert funding. I think that the country has got enough brains and money to use it intelligently, I hope when they give it to research. But it has been a ragged record.

Senator, I had a comment. If public use of money for research was so wonderful in their administration, the Geschickter Fund would not be in existence today.

Senator KENNEDY. But the point about it is that while there is, obviously, a lot of research that is being done, and obviously it is a very important part of our whole health effort, we already have a way and means of trying to do that, which is the National Institutes of Health for the most part, as well as private groups.

What we have seen here, just in your own example, is that for about 20 years the CIA channeled more than $2 million through the Foundation on work which, by your own admission, could have been done through open research. We found that within that kind of context, there are records which are inaccurate, which misrepresent the situation, which distort the situation. We have all of that particular package laid out before us.

Within that you have the compromising of the universities. We have failure for the protection of individuals who are being tested and we have failure of a follow-up in terms of adequate kinds of health protections for those people who have been subject to a good deal of the testing. You have as well the perversion of many of the different agencies of Government and in a very unnecessary way. You can say there may have been some benefits which spin off from all of that money that has been channeled or funneled through, but we certainly have no evidence of any of that in terms of the Agency. Maybe it has been written about by you or by others, but we certainly do not have accountability.

I think this is part of the troublesome aspects of this.

Dick, do you have anything?

Senator SCHWEIKER. Dr. Geschickter, you have described projects such as the oil shale and bacteria project, the use of radar waves on animals, and the study of animal brains and concussions. Is that all or are there some other projects, too, that you are familiar with?

Dr. GESCHICKTER. I am going to give you a very important one that I would like to publish, and I could not at the time. We had trouble with the Vietnamese switching from our side to the other side at night, and the Army had to have a way of labeling switchcoats or turncoats, so we helped them to develop a suspension of material related to pheno-phthalms, when we would give them their health shots or anticholeral vaccine, they could inject this fluorescent material. It is invisible except under ultraviolet light. I have it in

my arm. Some males of his staff have it in their arms, my nurse and others.

Now, this material stays visible year after year.

Now, here is the important spinoff of that. We have a lot of patients with bad hearts, and we do not know whether to operate on them or not. If it is a degenerative thing, they will not stand the operation, which is a long 4-hour operation. But if it is congenital heart valve—a murmur has been picked up in childhood—we can operate. If they have on their back carried their own recording or computerized symbol of what their congenital deformities were, then the doctor can put a light on the patient's back and get the history of all important things just by reading a few tatooed marks. That is what I want to publish.

Senator KENNEDY. You have been describing good projects.

What about some of the bad projects?

Dr. GESCHICKTER. I can give you one that I cannot understand. I think it will amuse everybody.

They spent $247,000 on mushrooms. Twenty thousand went to an agent whose—well, I had to decipher this, going back and forth to Philadelphia; and I picked up the Philadelphia ticket stamps—well, it was not punched out on his train record, and he had Atlantic City on the other side of one of them, and they were spending $107,667 buying mushrooms from Africa. And these things were then shipped down——

Senator SCHWEIKER. We grow mushrooms in Pennsylvania. Why did we have to bring them in from Africa?

Dr. GESCHICKTER. These are poison mushrooms. Let me tell you something about it.

The name is in the report but, by God, it is not in any dictionary. It is an African name of an African mushroom.

Now, they also spent $120,000 analyzing these mushrooms at a university laboratory, reputable State university, so here they are smuggling in mushrooms back and forth. I have a thousand pages of memos, mostly bus tickets, purchasing orders for natural drugs, but they all turned out to be mushrooms, and the total of that, Senator, is $247,000, so you will not eat a poison mushroom.

Senator SCHWEIKER. What did they do with the poison mushrooms once they had them?

Dr. GESCHICKTER. They sent down to—I will not name the university—to analyze them for toxic substances, but they apparently would poison somebody. I do not know what they did with them. I have not gotten the followup on that one.

Senator SCHWEIKER. Any others like that?

Dr. GESCHICKTER. And the other ones, I told you about, they were very interested in hashish cannabionol, and that original synthesis by the way was done by Roger Adams at the University of Illinois in 1932. I worked with him. So they went back to Illinois to do a lot of this work. They spent some money at another university, $36,500, to purify the allergens in ragweed that make you sneeze or give you hay fever.

Well, this may be very important, because with that as a test, they discovered a new antibody in the body called Gamma E, that is on surface cells only. It does not circulate in the blood as a rule. This led

to discovery that the mast cell liberates the chemicals that give you the hay fever and asthma. That was not a complete waste.

I mentioned the bacterial work, the concussion experiments for amnesia, and they did $177,000 worth of work trying to cure chronic alcoholism with various additives. I do not know how successful that is.

Senator SCHWEIKER. I was going to say I hope you are going to publish a paper on that.

Is there something you can tell us about a cure for chronic alcoholism?

Dr. GESCHICKTER. I will let you know.

Senator SCHWEIKER. Dr. Geschickter, in subproject 35, one-sixth of the space of the university hospital wing which the CIA contributed to, supposedly through your fund, was going to be available for the agency's research.

Who occupied that space?

Dr. GESCHICKTER. All of the space that is referred to in that particular memo, which I just saw last Saturday, was used by ordinary hospital laboratories and outpatient clinic for dentistry, outpatient clinic for ordinary hospital psychiatry, and they used it for a baby clinic on the first floor.

On the top floor is the only place I was interested in. They had $375,000 worth of isotope labs, and radio isotopic equipment, while now that type of equipment that is there amounts to over $2 million. I bought the first equipment myself for $7,500. This is why AEC was interested. That is why I started this money-raising effort through Admiral Strauss, a friend of mine.

Senator SCHWEIKER. According to the CIA documents, part of this agreement says there will be available the equivalent of hospital safehouse.

Dr. GESCHICKTER. Senator, I do not need to tell you if you go to a marriage ceremony, there has to be at least two parties at the altar. Here there is only one party behind closed doors making the agreement. I knew nothing of this. Neither did Georgetown.

Senator SCHWEIKER. Are you saying that no agreement existed or that you were not aware of any?

Dr. GESCHICKTER. There was no agreement that I know of and none that you can make with only one party, keeping it in a black box.

Senator SCHWEIKER. There was no safehouse, or you did not know of any safehouse?

Dr. GESCHICKTER. We have never found it.

Senator SCHWEIKER. It refers in here to a written memorandum. Let me get my notes on it.

Were you aware of, or did you sign, a memorandum with anyone who represented or who might have been from the CIA, a memorandum of understanding which might have specified the reasons for the CIA's donation and what the Agency hoped to get in return for its money?

Dr. GESCHICKTER. Never signed anything. I never heard of this until Saturday. I have heard of comments in the press. but what has gone on in that memorandum would scare anybody.

Senator SCHWEIKER. Were there any hospital staff assistants or people in this bu lding who were doing work that might have been construed to be connected with the CIA?

Dr. GESCHICKTER. None.

Senator SCHWEIKER. And you have——

Dr. GESCHICKTER. Not that I know of. It turned out there was none at that time.

Senator SCHWEIKER. The building we are talking about in subproject 35 was to have sheltered some pretty gruesome experiments that the CIA was interested in. They were worried about responsibility for this work. In a CIA document describing subproject 35, it says:

> The proposed facility offers a unique opportunity for the secure handling of such clinical testing in addition to the many advantages outlined in the project proposal. The security problems mentioned above are eliminated by the fact that responsibility for testing will rest completely upon the physician and the hospital.

What are they talking about there?

Dr. GESCHICKTER. I do not know because you cannot do that in a university hospital.

Senator SCHWEIKER. You signed no memorandum of agreement on this project?

Dr. GESCHICKTER. Absolutely not, or I would not be here today. I would be running out of the country.

Senator SCHWEIKER. Do you know of anybody on your staff who did sign such a memorandum?

Dr. GESCHICKTER. No, no one would have the authority to.

Senator SCHWEIKER. I am a little bit confused, Dr. Geschickter, about what the Government got out of this. In other words, for all this investment, and in light of all the cover and facilities for all the sensitive experiments that they expected to gain and referred to here in these documents, it does not seem like the CIA got its money's worth.

Dr. GESCHICKTER. I do not know what they had in mind.

Senator SCHWEIKER. Well, they certainly would rely upon you. I have to believe that you were one of the people they relied upon. To work through you as the conduit for this much money, they certainly must have relied on you in some way to produce——

Dr. GESCHICKTER. Senator, I was over 55 when most of this was dreamed up, and it takes 4 or 5 years to build a building, and I could drop dead in the meantime. I do not see how you can make a promise on one side and expect me to live forever.

Senator SCHWEIKER. How was the building financed again? Where did the $3 million total come from?

Dr. GESCHICKTER. All of that is inaccurate, because what actually happened is different. Georgetown built three things at once. They built the Kober-Kobian building, they built a nurses school, and they built the Gorman building, no one of which comes up to anything like the mentioned amount.

Senator SCHWEIKER. How was the Gorman building financed? Just give a brief breakdown.

Dr. GESCHICKTER. I have not the slightest idea on that.

Senator SCHWEIKER. What was the Geschickter Fund role in that building then?

Dr. GESCHICKTER. None. I was not given a square inch.

Senator SCHWEIKER. What was your relationship with the building for the hospital?

Dr. GESCHICKTER. My relationship was to help with the building fund. It specified no building whatsoever. I gave them money with no strings attached.

Senator SCHWEIKER. How much was that again?

Dr. GESCHICKTER. $375,000.

Senator SCHWEIKER. Where did the $500,000 come from?

Dr. GESCHICKTER. I have not the slightest idea.

Senator SCHWEIKER. Did you combine the $375,000 with somebody else's money to equal $500,000?

Dr. GESCHICKTER. Never. I do not know where those figures came from.

Senator SCHWEIKER. And how much did the Gorman Building cost?

Dr. GESCHICKTER. I have not the slightest idea. It depends on who the contractor was and whether he put in extras.

Senator SCHWEIKER. Well, your role was, I thought, connected with the building fund?

Dr. GESCHICKTER. My role was simply to build up Georgetown to where it could hold its head up in any medical school in the country, and that is just what happened.

Senator KENNEDY. Finally, Dr. Geschickter, using the example of the Agency's description about Georgetown University, it talks about the objectives and the details. This is in justifying the commitment of the Agency.

Dr. GESCHICKTER. Is this 35?

Senator KENNEDY. This is on 35.

It talks about objectives and details of the work to further technical services, it talks about chemical and biological requirements, and it goes on to talk about the Geschickter Foundation Fund for Medical Research used as a cutout, whereby arrangements would permit Agency sponsored research projects using Agency personnel to be carried out in the new wing without Georgetown University being aware of CIA interests. Arrangements would also provide the Agency with the equivalent of a hospital safehouse and so forth. All Agency funds for Geschickter for Georgetown would be met by matching U.S. grants.

Now, the fact is, that is a great deal different from what actually happened in terms of what you have described here today. It would appear to me that either the Agency did that without you knowing it, to make it sound so appealing that whenever the Director of the Agency went to the President or the ultimate authority for approval of it, they were going to approve that, and yet that is a good deal different from what the actual facts were in terms of your understanding.

Either the memo is clearly a misrepresentation, and then we have to ask ourselves why did the Agency do it? Or did you not know what they were doing with the money even though you were a witting subject on that, you did not know what they were doing. Either way this does not make any sense.

Dr. GESCHICKTER. It makes no sense, Senator. I agree with you.

Senator KENNEDY. If they were overselling what they were doing, and were not doing it the way you described, you were the principal agent of that kind of factor, it then leaves the question about who was getting the resources, who was getting the money, and what were the real purposes, and maybe we do not know the answer to that

one. Or if it is that they were fully interested in doing the kind of things you were doing in terms of research, then there were other agencies of Government that could have done it, provided protection for individuals, and done it very satisfactorily.

Now, it seems to me that that is the dichotomy that we find ourselves in at this time. In either way, it just does not make any sense at all.

Dr. GESCHICKTER. I agree with you. I agree with you. I cannot make any sense out of it.

Senator SCHWEIKER. I think one thing that does make sense from my past experience on the Intelligence Committee, is that one of the key justifications for subproject 35 of MK-ULTRA as specified in this memorandum, one of the key statements in the outline of the project that has become available to us is that "agency sponsorship of sensitive research projects will be completely deniable." It appears to me that the agency was overwhelmingly successful in achieving that objective.

Here we are fumbling and stumbling around trying to ascertain what went on and who's responsible. One of the key aims of the subproject was complete deniability.

Dr. Geschickter, you seem to have it, we seem to have it, and the project seems to have been handled so that it was a complete success in terms of complete deniability.

I would like to come back once again, to the memorandum of agreement for this project, which seems to be so very elusive.

I would like to read from article IX in the CIA document that was made available to us.

> Memorandum of Agreement: A memorandum of agreement will be signed with (blank), outlining to greatest extent possible the arrangements under which the hospital space under his control will be made available to chemical division personnel and the manner in which cover will be provided and other benefits attained. No contract will be signed since (blank) would be unable to reflect any of the Agency's contractual terms in his arrangements with the university when (blank) makes the donation in question. The memorandum of agreement will be retained in TSS.

Now, I am really confused. This could not be more specific about obtaining a written memorandum of agreement. It talks about the donation to the university, the reasons why a contract can't be drawn up, and the need for a memorandum of agreement specifying certain things about cover, and all of that. Elsewhere, the documents explicitly say that you are aware of the terms of the agreement and will cooperate.

You are telling me that you absolutely know nothing at all about any memorandum of agreement?

Dr. GESCHICKTER. Absolutely nothing. Even if there was such agreement, it would not be worth the paper it was written on. You cannot do that in a university hospital.

Senator SCHWEIKER. Why not?

Dr. GESCHICKTER. Because you have got a nursing staff and every man of caliber on the hospital staff has to have appointment that comes through the faculty, he has to get—he gets tenure, he has to be approved by a 20-man faculty, and you cannot do it that way.

Senator SCHWEIKER. I have got to believe the CIA got something for the $375,000, minimum, they put up.

Dr. GESCHICKTER. I cannot answer that.

Senator SCHWEIKER. Did they ever ask you to sign such an agreement, and you refused?

Dr. GESCHICKTER. Never discussed any of this with me. Imagine what I thought of it when I read it.

Senator KENNEDY. What did you think?

Dr. GESCHICKTER. I was in Alice in Wonderland's domain.

Senator KENNEDY. Why would they do it? Do you think you were being set up?

Dr. GESCHICKTER. I do not know the purpose. I cannot answer any of your questions. There were plenty of hospital facilities all over the country, they did not have to build one.

Senator KENNEDY. Do you think it is possible that you were being either misled or kept in the dark about all of this?

Dr. GESCHICKTER. I was certainly in the dark. I never heard of this. It was deliberately kept from me, or intentionally or unintentionally, I do not know how to answer it.

Senator KENNEDY. Even though you were working with the Agency in terms of conducting——

Dr. GESCHICKTER. They kept all of this from me. I never saw it, never heard of it, it was never discussed.

Senator KENNEDY. You were still the conduit of the money, though?

Dr. GESCHICKTER. The purpose was just research, not the building.

Senator SCHWEIKER. What was the reason they told you they wanted to make this charitable contribution to the cost of Georgetown's——

Dr. GESCHICKTER. They never told me anything until years later they told me they got into a fight with Admiral Strauss of the AEC, and when they would not put up the money, they were going to put it up themselves.

Senator SCHWEIKER. What was the rationale when the money mysteriously appeared for you to give to Georgetown?

Dr. GESCHICKTER. It was supposedly for radioisotope laboratories, which are still there, and that is the only thing tangible that was ever obtained.

Senator SCHWEIKER. Well, there was more than that, because the ensuing research projects that you described—you described a series of six or seven projects.

Dr. GESCHICKTER. Which projects are you referring to Senator?

Senator SCHWEIKER. Oil shale, effects of radar waves and brain concussion in animals, poison mushrooms, halogen derivatives excreted through the lungs.

Dr. GESCHICKTER. They were nearly all farmed out in other places. We did not have to even supply a test tube in most of them.

Senator SCHWEIKER. Right, but the funding for those projects went through you?

Dr. GESCHICKTER. Yes; but none of that money stuck to our hands. We got 4 percent. But that went right back in research. So all these things you are talking about occurred at other universities, had nothing to do with Washington, D.C.

Senator SCHWEIKER. You do not draw any connection between the money they put in the building and the ensuing research program?

Dr. GESCHICKTER. None at all.

Senator SCHWEIKER. Who approached you with the money for the building?

Dr. GESCHICKTER. The original idea, and the money that they would contribute came from a man who is dead, who said he represented a Philadelphia foundation, and he was interested in support, because there was a mental retardee, and they wanted to keep contributions anonymous, and he said he thought he could get some matching money. But he never said he would give us that amount.

Senator SCHWEIKER. That was the conduit?

Dr. GESCHICKTER. That was the conduit. That was the original conduit.

Senator SCHWEIKER. Did that man have any dealings with you or any connection with the subsequent research projects you just described as funded through you?

Dr. GESCHICKTER. No; he died pretty soon, thereafter.

Senator SCHWEIKER. Who did direct, or oversee——

Dr. GESCHICKTER. I knew nothing about anything, because the money, the final accounting of the money, and where it came from, we never knew exactly. The only person who might know it was our financial director, and he is also dead.

Senator SCHWEIKER. Why did they do it through you?

Dr. GESCHICKTER. They did not do it through me personally.

Senator SCHWEIKER. Well, it was your fund. How were you made aware of the availability of money? I am not clear on what relationship existed between you and the CIA, with respect to funds for these projects.

Dr. GESCHICKTER. Are you referring to the projects of building the hospital, or these other projects?

Senator SCHWEIKER. These other projects.

Dr. GESCHICKTER. Through the other universities——

Senator SCHWEIKER. I am not clear on how that worked. In other words, operationally, how did those projects proceed, and how were you used——

Dr. GESCHICKTER. How was I used? These universities submitted research proposals to the Geschickter Fund. These research proposals were on university stationery. They outlined ongoing research, and gave their publications. They asked for a certain sum of money. This money requested for these projects were then shown to me as research proposals and the money was then made available through our bank account. We then passed that money on to these particular universities on the basis of their research proposals, all of which are indexed through the work of your committee, that made the documents available to me.

Senator SCHWEIKER. It was the Philadelphia Foundation that acted as the conduit for money on the building projects?

Dr. GESCHICKTER. Yes. We only got, Senator Schweiker, we only got about $75,000 anonymously in our books that I can trace to CIA. All this money that we are talking about, the big volume of money, came through the Philadelphia Foundation.

Senator KENNEDY. Thank you very much.

Our next witnesses are Mr. David Rhodes, a former Central Intelligence Agency employee; and Phillip Goldman, also a former CIA employee.

Gentleman, would you stand?

Do you swear the testimony you give will be the truth, the whole truth, so help you God?

Mr. RHODES. Yes.

Mr. GOLDMAN. Yes.

Senator KENNEDY. Mr. Rhodes, did you work with the CIA?

STATEMENTS OF DAVID RHODES AND PHILLIP GOLDMAN, FORMER CIA EMPLOYEES

Mr. RHODES. I did.

Senator KENNEDY. What was your job with the Agency?

Mr. RHODES. I worked as a psychologist on the staff of Technical Services Division.

Senator KENNEDY. From what period?

Mr. RHODES. Approximately 1957 or 1958, until about 1961.

Senator KENNEDY. Now, did you know Mr. Pasternak?

Mr. RHODES. I did.

Senator KENNEDY. We had invited Mr. Pasternak, subpenaed Mr. Pasternak. He was scheduled the last time, and then at the final hour he decided not to show, and we attempted to get ahold of him. We have not found him since.

Did you and Mr. Pasternak travel to California together?

Mr. RHODES. We did.

Senator KENNEDY. Did you know there was a CIA safe house in California?

Mr. RHODES. Yes.

Senator KENNEDY. And the first trip you made to California with Mr. Pasternak was to understand the different ways of delivering LSD to unsuspecting citizens, is that correct?

Mr. RHODES. That is correct.

Senator KENNEDY. Do you want to tell us the story in your own words?

Mr. RHODES. Well, very simply, Mr. Pasternak and I went to California. We went there with a reasonable supply of money, and proceeded for about a week, simply to go around to a number of bars, and drink and meet people.

During that time we just were trying to establish some sort of relationship with people so that we could subsequently invite them to a party on some basis that would be acceptable to them for that purpose.

Senator KENNEDY. Then what happened after the period of a week?

Mr. RHODES. Well, after that week was completed——

Senator KENNEDY. The purpose, as I understand it, was to find ways of delivering LSD to unsuspecting citizens?

Mr. RHODES. That is correct. We were testing a particular device, to determine if LSD could be given in small quantities via an aerosol delivery.

Senator KENNEDY. Aerosol delivery?

Mr. RHODES. Yes; just spray it in the air, that is correct.

Senator KENNEDY. Did you line the people up for a party?

Mr. RHODES. Yes. We lined up people that we thought we could invite to such a party.

Senator KENNEDY. And that resulted from your visit to the bars?

Mr. RHODES. Various bars.

Senator KENNEDY. What was supposed to happen at the party?

Mr. RHODES. At the party the intent was that we would be able to spray the aerosol, which as I understood it, had a sufficiently small

quantity, or the amount that could be ingested would be sufficiently small, so that you would need practiced people to observe any differences in behavior of people, but just to see if it could be delivered in that fashion.

Senator KENNEDY. Was aerosol LSD brought out to the west coast?

Mr. RHODES. It was brought out; yes.

Senator KENNEDY. Who brought it out?

Mr. RHODES. John Gittinger, as I recall.

Senator KENNEDY. What happened after Mr. Gittinger arrived out there in California?

Mr. RHODES. We had a singular problem. The particular house was not air-conditioned, and it was hot, and we had the problem of whether or not we could arrange to keep windows and doors closed long enough for this type of delivery, and the weather defeated us.

It was as simple as that.

Senator KENNEDY. You could not postpone the party?

Mr. RHODES. We were there for a period of time. Actually, Mr. Gittinger, as I recall, tried it out on himself in the bathroom. He felt the system was not working adequately to continue the exercise.

Senator KENNEDY. What did Mr. Gittinger do?

Mr. RHODES. The only room in the house that could be completely closed off easily, and it would not have circulation, was the bathroom, so he sprayed the aerosol in the bathroom, to see if he could detect whether he was ingesting any of it.

Senator KENNEDY. What happened to him?

Mr. RHODES. Apparently he did not get enough, in his terms, that he felt it would be useful to try to continue it for a group of people.

Senator KENNEDY. Did he spray it all in the bathroom?

Mr. RHODES. Yes; to the best of my knowledge. I did not see him do it. He reported this after he had done it.

Senator KENNEDY. So then what happened? He came out of the bathroom, and what happened?

Mr. RHODES. Frankly, Senator, we decided to scratch it at this point. We were grateful we had not invited a bunch of people to a party.

Senator KENNEDY. So, as I understand it, three grown men flew from the east coast to the west coast to spend a week in the bars out there, to gather people for a party, and Mr. Gittinger—he was the only one that went in the bathroom?

Mr. RHODES. And only two of us were in the bars.

Senator KENNEDY. Then what happened? Then you all went back to the airport?

Mr. RHODES. Simply closed up shop.

Senator KENNEDY. Closed up shop?

Mr. RHODES. Got on the airplane and came home.

Senator KENNEDY. Can you make any determination of what the value of that particular experience was to the Agency at all?

Mr. RHODES. Well, you know, implied in what I said was that you cannot deliver it by aerosol under those conditions.

Senator KENNEDY. Did you and Mr. Pasternak take any other trips to San Francisco? Was this the only one?

Mr. RHODES. Yes, sir, we did.

Senator KENNEDY. You did?

Mr. RHODES. Yes.

Senator KENNEDY. What was the purpose of the other trip?

Mr. RHODES. Totally unrelated to anything related to drugs. We attended the First National Convention of Lesbians in this country.

Senator SCHWEIKER. Can you report on the value of that trip?

Senator KENNEDY. What is the connection?

Mr. RHODES. The major connection was that the primary work that we were doing, of a psychological nature, was to test a particular theory developed by Mr. Gittinger, in terms of nature of personality——

Senator SCHWEIKER. This is after he has been in the bathroom?

Mr. RHODES. That has been developed over years. The theory was very useful in that unlike most of what was being done at the time, you could work from testing materials—that is, psychological testing to behavior, and then with training observe behavior, and work back to how people would perform on tests. And to do this there were a number of different kinds of groups visited by one person or another, to try to get test results, observe behavior, and build normal backgrounds of personality materials related to this particular testing operation.

Senator KENNEDY. Did you know Morgan Hall?

Mr. RHODES. Yes, I met him.

Senator KENNEDY. Did you know anything about the details of the safe house he ran in San Francisco?

Mr. RHODES. This is the safe house that we stayed at, Pasternak and I stayed at. That is where the party would have been held. I am talking about the one in the Marin County.

Senator KENNEDY. There were others?

Mr. RHODES. Apparently there were others.

Senator KENNEDY. Before leaving this, just in terms of the testing of the LSD aerosol, do you have any sense at all about the fact that these people would have been unwitting subjects, subject to this kind of drug, that it has had some extremely important negative impacts on individuals, some absolutely tragic results?

I think we have seen those perhaps more in recent times than that, but I am sure in terms of those that understood the drug, even during that period of time, were fully aware of it, and I do not know whether you have any reaction.

Obviously it is easier to look back in terms of the atmosphere, the moral atmosphere of the times was different, but I do not know whether there is anything you would like to say on that, or whether you would do it again.

Mr. RHODES. That is really hard for me to say, Senator. I was aware that this was an unwitting administration. That was the intent. It did not come off. That still was the intent.

The purpose of this sort of testing was simply that a person who takes an LSD trip and can attribute it to the LSD was one kind of behavioral reaction. And there was some reasonableness to believe that a person who had some of these internal reactions and did not know what to attribute them to would behave in a different way. We felt we needed to do this in connection with some of the brainwashing work, and some of the other things, as to whether there was an unwitting thing, and the only way we could discover to do it was to do it in this fashion.

We did take precautions to try to make it smallest possible dose that could be delivered that would be detectable. But what you are implying is perfectly true.

Senator KENNEDY. Mr. Goldman, how long did you work for the CIA?

Mr. GOLDMAN. From March of 1958 until January, I think, around 1968, January.

Senator KENNEDY. Were you not involved in laboratory development, gadgets and devices of different kinds?

Mr. GOLDMAN. Yes.

Senator KENNEDY. Could you describe what you know about the operation of the New York safe house?

Mr. GOLDMAN. The New York safe house was set up at the request of, I believe, it was Dr. Bortner, that it would be a facility that would be available for use by the Agency in the event they wanted to use it.

In connection with that it was also made available to the Bureau of Narcotics, for whatever use they wished to make of it. It was also at that time suggested to me that we put in a two-way mirror, so that any interviews and that sort of thing, which would be going on in one room could be observed from the other room. And a tape recorder was also installed.

To the best of my knowledge, Senator, this particular place was used by the Bureau of Narcotics in their drug work, and as far as the Agency was concerned, I was not made aware of any use that it would be put to during the time.

It was understood that it would possibly, or could be used by other parts of the Agency, or other parts of the groups that we were working with.

Senator KENNEDY. Well, of course, you have seen the document made in 1963 which bears your name on it, and then the request for future funds for the continuation of the subproject 42. It says that in the past year a number of covert and realistic field trials have been successfully carried out.

So you must have some knowledge or awareness?

Mr. GOLDMAN. Senator, there was, to the best of my knowledge, nothing carried out in that safe house, to the best of my knowledge.

We did, however, we did do some—through the Bureau of Narcotics—we did get a camera, worked with a photograph, to determine the presence of marijuana and the presence of opium poppies. We also worked through them to get a device—we had a material with ivy, Virginia ivy, English ivy, which when put on it would stunt it, and prevent it from growing any further, would stop its growth at that point.

We used the Agency, Bureau of Narcotics, at that point, to get for us a sprayer which would spray this particular material in a very definitive band, and a certain width.

We also, through the Agency—not through the Bureau—through the project we also had developed a means for applying the tear gas CS that could be fitted into a billy club, or a riot stick.

We had at the same time given to the people there at the safe house, and who it was now, I cannot recall, samples of tear gas dispensers which could be used for self-protection.

Now, the wording—I might point out that the wording of a lot of these projects is deliberately misleading.

Senator KENNEDY. The what?
Mr. GOLDMAN. The wording.
Senator KENNEDY. The wording on what?
Mr. GOLDMAN. The wording on a project, the reason for a project.
Senator KENNEDY. You mean the justification for the project?
Mr. GOLDMAN. Justification, no, hold on.
Senator KENNEDY. The ones that were bumped upstairs, so that——
Mr. GOLDMAN. The original——
Senator KENNEDY. Those having responsibility in making the decisions were getting information that was deliberately misleading?
Mr. GOLDMAN. I was told, whether it was Dr. Bortner.
Senator KENNEDY. Speak up a little.
Mr. GOLDMAN. I was told, I do not know whether it was Dr. Bortner, or who it was at the time, that we were to continue the safe house and justify its use.
Senator KENNEDY. You were just told by your supervisors to continue the safe house, and work out a justification for it?
Mr. GOLDMAN. Right.
Senator KENNEDY. Why would he do that?
Mr. GOLDMAN. To provide the justification, so that he could extend it more.
Senator KENNEDY. You were not supposed to justify from what you knew about it, even though you had some responsibility——
Mr. GOLDMAN. From what I knew, yes, sir.
Senator KENNEDY. You were told from your supervisor to go ahead and justify it?
Mr. GOLDMAN. As far as I know, there was nothing done in that safe house.
Senator KENNEDY. But why would a superior ask you to just work out a justification—did that happen in any other program that you were involved in in the agency?
Mr. GOLDMAN. Yes, sir.
Senator KENNEDY. In other programs?
Mr. GOLDMAN. In another area, where the wordage of the project was such that it showed over or surreptitious, or whatever it was.
Senator KENNEDY. Where would the real facts be in terms of what was going on? If the agent who was going to justify it is told by the superior how to word the explanation, it was not only in this project, but in another project as well?
Mr. GOLDMAN. It must have been used by other people, that is my only solution.
Senator KENNEDY. Did you know what went on in the San Francisco safe house?
Mr. GOLDMAN. The San Francisco safe house, I never knew as a safe house, until the time that the episode that Dr. Rhodes mentioned to you. I had no idea at that time that—I am quite sure that this was a temporary establishment. I was aware that it was going to be going——
Senator KENNEDY. Excuse me?
Mr. GOLDMAN [continuing]. I was aware of what was going to be going on there, because I was the person that put together the aerosol device and the tripping device to set it off.
Senator KENNEDY. You were aware of that project?

Mr. GOLDMAN. That it was——

Senator KENNEDY. Experimental?

Mr. GOLDMAN. On an experimental basis.

Senator KENNEDY. Were you aware of other research going on?

Mr. GOLDMAN. Not at that safe house.

Senator KENNEDY. At any other safe house?

Mr. GOLDMAN. No; as far as I know, there was no other safe house. Occasionally, when I would go out I would meet with Morgan Hall at a downtown place, which was simply nothing more than a motel room.

Senator KENNEDY. You carried the money to the people running the safe houses?

Mr. GOLDMAN. Generally sent it to them, or carried it to them. Once in awhile I carried it to them. I generally sent it to them.

Senator KENNEDY. You had the responsibility of getting the money to them?

Mr. GOLDMAN. I got it to Morgan Hall, sent it to him.

Senator KENNEDY. Morgan Hall is George White?

Mr. GOLDMAN. That is my understanding.

Senator KENNEDY. We have in the record that since 1963 you approved some $2,000—that is, 22 checks, undercover agents for operations, and you approved all——

Mr. GOLDMAN. Yes.

Senator KENNEDY. And since 1964, some $4,800, and these things go on year after year. Yet you do not know what this money was for?

Mr. GOLDMAN. You did not ask me that until this moment.

Senator KENNEDY. OK, I will ask you.

Mr. GOLDMAN. You did not ask me. You are putting words in my mouth.

Senator KENNEDY. Did you know what the money was for?

Mr. GOLDMAN. Thanks to your excellent staff, and the careful review of some documents yesterday, after I had been out of the United States for over, practically a month. I came back voluntarily so I could testify, and cut short the business trip, and thanks to your excellent staff, I was shown some documents, and asked if that would refresh my memory, because in the—because the last time when we sat up across from each other, I could not remember, and I frankly could not.

They did show me these, and this, to the best of my knowledge—I can tell you what was involved. When I took over that project, and it was simply passed onto me as another person to monitor the project, they already had, apparently from the records I had seen, done some work that involved a drug of one sort like tetrahydro cannabinal, some of these things, and I sat down with White at that time and asked him, in his opinion was there any justification for any continuation, and what was the result of what he had seen.

He thought that he had milked that information dry, as far as any information would be concerned.

My interest in, has been all the time I was with the Agency, has been more directed toward the devices and gadget area, and harassment type of things. For that purpose I had developed for us different kinds of materials, and different things which he evaluated for me.

I took them out there, turned them over to him, and asked him if he would take a look and let us know whether or not it was suitable for this purpose.

Now, among these things was a launching device to launch a glass ampule that would break, that would even have in it tear gas CS—at that time we had CS available to us, a very fine powder, which air would blow around, or a very odoriferous material which could be used, referred to by lot as stink bombs, used for breaking up demonstrations.

Both of these things were for the purpose of disrupting or breaking up demonstrations.

Senator SCHWEIKER. What was the Agency's interest in tear gas?

Mr. GOLDMAN. The purpose there was to break up demonstrations, overseas countries, where they had people crowded into a plaza, and it could be launched, and launched in such a way that the person launching it would not be seen, and would not have the problem that has happened in one case, where they had a hotel overlooking the plaza and the person drew back with the odoriferous material and threw it out the window, and it hit the side of the window, and bounced back in the room.

So we developed a very silent launching device, which you could throw it about 100 yards.

Senator KENNEDY. Could we ask how these were tested, how were they evaluated?

Mr. GOLDMAN. They were evaluated, to be very frank with you, participated in some of the evaluation of these, because I was interested in doing it, seeing it myself, and we used the beach house from San Francisco, and threw the stuff at a very isolated spot, so we would not be observed, and measured the drift of the thing to find out if it is effective, how far it would be effective and noticeable.

One thing this particular powder material had which we worked up the devices, in which I turned over the devices to him, that is, to Morgan Hall, to evaluate for him which I did not participate in, taking the material, and put it in very fine glass, thin glass ampules, which could be dropped on the floor and stepped on covertly, and a very little bit of the powder would come out.

This particular material is so potent if you want to use that word, in irritating the nose, it is perfectly harmless, that it causes sneezing if it is in a closed room. If it is in a room that is in an exhibition room, if it is in a small meeting room, or something of that sort, even a large meeting room, it will cause very, very violent sneezing and continued sneezing, and the only way to get rid of it is to get out.

The purpose again here was to get the people out of it, for example, in trade fairs, and I was told the thought was it could be used in trade fairs overseas, in unfriendly country exhibit areas, where it would be used, and it would not be attributed, because it would not be detected.

Senator KENNEDY. Do you know if it ever was?

Mr. GOLDMAN. As far as I know, I really do not know whether that particular material was. I do know that the other material was, but I was telling about the launcher.

The other thing that we did, the other thing that we had him evaluate, we had a material that was very potent on dogs, for quieting guard dogs.

I remember I gave him some of the material, gave him the right combination of the material to put in hamburger, ground meat, to try on some dogs, which he knew were guard dogs, and which would bark, in whose yard, I do not know, where these dogs were, but he did evaluate this for me, and he said it did work.

He said the next morning the dogs were back up, but at the time they were completely silenced.

Senator KENNEDY. What about the swizzle stick?

Mr. GOLDMAN. The swizzle stick, this particular material—well, the idea was that we would develop, or make a swizzle stick for a cocktail, which would have the coating on it, which would be soluble in water, soluble in the cocktail itself, but which when you use it, would be undetectable. In other words, it would not look unnatural when you use it, lay it on the table alongside of it, nor did it create any adverse taste at all.

We used, for that purpose, material which had a very bitter, a very bitter effect, very, very tiny little bit, which when put on the swizzle stick first, coated it, and I gave these to Mr. White to try out to see if the material came off in actual use the way we hoped it would come off. He reported back to me again on this, that it did work, that it worked quite well.

Senator KENNEDY. Who did he test that on, do you know?

Mr. GOLDMAN. I have no idea. He told me that it worked, that it passed, in other words, surreptitiously.

Senator KENNEDY. You must have assumed this was being tested in the safe house?

Mr. GOLDMAN. No; I would think not. I think it would have been tested in the bar, because to the best of my knowledge, this safe house you keep talking about, I think was set up for this particular operation that they are talking about, and I do not believe it existed after that.

Senator KENNEDY. We will hear from Dr. Gottlieb tomorrow about that.

Mr. GOODMAN. As far as I know, I do know that one other thing that we worked on, and in this particular case this was something that was administered, or used to be administered to individuals, it was an amino type of acid, which was supposed to be perfectly innocuous when used, but was supposed—I even recall the name—gamma hydroxybutyric acid, which was reputed in the literature to cause sleepiness.

Senator KENNEDY. Sleeplessiness?

Mr. GOLDMAN. Sleepiness. To make one more lethargic. Not put you to sleep, not knock out drops, but make you sleepy.

I gave him several samples of it, and asked him if he would evaluate it. I thought there was a slight amino, I would say like glutamic acid, with due respect to Senator Schweiker, it tastes like a mushroom, and has that mushroomy flavor of this particular one.

Senator KENNEDY. What about the syringe, the hypodermic needle to deliver drugs in wine bottles?

Mr. GOLDMAN. Which one is this now?

Senator KENNEDY. The hypodermic needle to deliver drugs in wine bottles. Did they test that out there, too?

Mr. GOLDMAN. Yes; they tested that out there. The purpose of testing this, Senator, was to find out if the bartender, in handling the bottles, or if a person subsequent to that would see that the cork had been penetrated, and we found out by using a very fine hypodermic

syringe of sufficient length, and putting it at the proper place, over the cap, so that the hole would be undetected, and you could smear over a little bit with something to cover it over, I was told that it worked perfectly for the purpose.

Senator KENNEDY. This was tested by Morgan Hall, too?

Mr. GOLDMAN. Only to the extent that he tested it to find out if it could be used. I showed him how to use it, where it should be put in different kinds of bottles.

Senator KENNEDY. This was putting drugs in wine bottles?

Mr. GOLDMAN. He did not put drugs in wine bottles. If he did, I did not know about it.

Senator KENNEDY. Was that not the intent of the test?

Mr. GOLDMAN. The purpose of the test was to find out if it would be noticed.

Senator KENNEDY. How would you do that? You would do it to a wine bottle in a bar, I imagine?

Mr. GOLDMAN. That is right.

Senator KENNEDY. Do you presume that he did do it to a wine bottle in a bar?

Mr. GOLDMAN. I presume he did it someplace. He may have done it and asked people to take a look at the bottles, to see if they saw it.

Senator KENNEDY. What do you assume?

Mr. GOLDMAN. I would assume the latter.

Senator KENNEDY. What about passing of pills surreptitiously?

Mr. GOLDMAN. Oh, in this particular case, we had, or thought we had, indeed in the case of a meeting of some sort, where they would want to put a pill in a person's glass, or at a bar, and the purpose here was to find out if it could be passed on, and could be introduced into the glass without attracting the attention of the individuals, and he again reported to me that in this particular case that you better go back to the drawing board, because when it hits the water it fizzles up, and made fuzz on top of the water.

Now, we had another particular thing that we did, in which he evaluated, and did it so it could not be observed and checked out in any way, was to take thin glass fibers, polyglas fibers, and put an odoriferous material in them. These were sealed at the end and cleaned off, and these particular fibers could then be introduced underneath the edge of a rug, and by stepping on the rug it would break it and release the odoriferous material and create a bad odor in a meeting room.

Senator KENNEDY. Also, there were some kinds of drugs which gave a person diarrhea, as I understand it?

Mr. GOLDMAN. Yes.

Senator KENNEDY. All of these were tested, and being evaluated by Morgan Hall?

Mr. GOLDMAN. Yes, sir.

Senator KENNEDY. They were all basically on unwitting subjects?

Mr. GOLDMAN. I would assume that this was so. I never participated in any of them, but the idea being that they would not be attributed, and that the person, for example, would feel all right.

Another test which was made——

Senator KENNEDY. We have got a long list of different things, different examples, of what was being tested. We have the background of all the other facts on unwitting subjects and a whole wide range of activities.

It was quite clear that, in terms of the west coast, and to some extent, as well, the east coast——

Mr. GOLDMAN. To the best of my knowledge, the east coast did not——

Senator KENNEDY. There were east coast——

Mr. GOLDMAN. This I did not know.

Senator KENNEDY. Well, we will not get into that now.

Just finally, in the documents that you are familiar with here, is this what you are referring to when you say in the past year a number of covert and realistic field trials have been successfully carried out?

Mr. GOLDMAN. I would say so; yes. There were a number which I could go into.

Senator KENNEDY. I do not think so. I think that is all right.

Senator SCHWEIKER. I would just like to ask Mr. Rhodes a question related to the point Senator Kennedy brought up earlier about the ethics of unwitting testing.

Was your answer directed to the time you were operating in, then, or now? I was not quite clear about your view of unwitting tests.

Mr. RHODES. Yes, Senator, it was to that time frame.

That was a peculiar period in our history. I really cannot answer the question, if another new, strange hallucinogen or something like that came on the scene, as whether I would participate in such an activity or not. At the time I thought it was worthwhile to do. There would be no reason to do any such thing today that I know of.

Senator SCHWEIKER. Let us bring it up to today. This committee is confronted with the task of writing a new law for the protection of human subjects. One pertinent question I would like to ask is if the American Psychological Association, or the body that performs accrediting or licensing functions for clinical psychologists, prescribes any kind of ethical standards on this issue today?

In other words, is there an ethical standard in the profession, developed by the American Psychological Association or some other group, relating to unwitting tests on human subjects today?

Mr. RHODES. Senator, I am not absolutely sure. But having read those ethics, I would strongly suspect there is a very strong statement.

Senator SCHWEIKER. What do you feel the needs and responsibilities in terms of new legislation and within the profession are today in this regard? Forget the past and the time frame of the past. What about today? What is your judgment on what is needed?

Mr. RHODES. My personal feeling is that administering of drugs to people unwittingly, it is something that we—this is the time to stop this sort of thing. I would suggest we not have any unwitting administration in the future. That is a personal opinion.

Senator KENNEDY. Thank you very much.

Our last panel of witnesses include Mr. Charles Siragusa, former Deputy Commissioner of the Federal Bureau of Narcotics; Mr. George

Belk, former District Supervisor for the New York Office of the Federal Bureau of Narcotics; Mr. Ira Feldman, former agent for the Federal Bureau of Narcotics; and Dr. Robert Lashbrook, former CIA employee.

Gentlemen, please rise and raise your right hands.

Do you swear the testimony you give will be the truth, the whole truth, and nothing but the truth?

[Messrs. Feldman, Belk, Lashbrook, and Siragusa answered in the affirmative.]

Senator KENNEDY. We will be having Dr. Gottlieb with us tomorrow, who will respond to a number of related areas of inquiry here.

I think it is important that we understand that he will be testifying. He is working closely with the committee. These matters have been related obviously to the areas of inquiry here.

He has been granted immunity, so he has been very responsive.

Now, we might start off with Dr. Lashbrook.

According to the CIA response to our September 25, 1975, letter, Dr. Lashbrook entered on duty on August 9, 1951, and transferred to TSS on November 24, 1951. He was a research chemist on Project Engineer.

From 1952 to 1956 he was Deputy Chief of the Chemistry Division of TSS under Dr. Gottlieb. He continued in this area until he resigned in 1963. Is that correct?

STATEMENT OF ROBERT LASHBROOK, M.D., FORMER CIA EMPLOYEE; ACCOMPANIED BY CHARLES SIRAGUSA, FORMER DEPUTY COMMISSIONER, FEDERAL BUREAU OF NARCOTICS; AND GEORGE BELK, FORMER BUREAU OF NARCOTICS SUPERVISOR, A PANEL

Dr. LASHBROOK. Essentially so, yes.

Senator KENNEDY. Would you like to correct it in any way?

Dr. LASHBROOK. I was not necessarily Deputy Chief that long.

Senator KENNEDY. How long were you?

Dr. LASHBROOK. I do not recall.

Senator KENNEDY. Did you work with Dr. Gottlieb?

Dr. LASHBROOK. Yes; I did.

Senator KENNEDY. Can you tell us what your relationship with Gottlieb was in terms of the hierarchy?

Dr. LASHBROOK. Well, I was his Deputy, which basically meant that when he was out of town I would act for him largely in an administrative capacity, or to answer questions, or anything that would come up.

Senator KENNEDY. Were you involved with the projects that have come to be known as MK ULTRA?

Dr. LASHBROOK. Yes.

Senator KENNEDY. You are listed as project monitor on the MK ULTRA subproject No. 3, which involved realistic field testing of R. & D. items of interest to the CIA.

Do you remember that project?

Dr. LASHBROOK. Which one was that?

Senator KENNEDY. That is New York safe house.

Dr. LASHBROOK. Morgan Hall?

Senator KENNEDY. New York safe house, Morgan Hall; yes.

Dr. LASHBROOK. Well, I may have been listed as the monitor, or what not for that project, but in fact I never did. My personal knowledge of that particular operation was strictly secondhand.

Senator KENNEDY. You were listed, but you say you had no knowledge, or you did not have anything to do with it?

Dr. LASHBROOK. The fact that I might have been listed now I do not know—yesterday I guess, I was shown a piece of paper on which I was listed, and this I believe was the authorization for that particular project.

Now, my signature was on there, along with many other signatures in the piece of paper that I saw. The fact that my signature on there does not necessarily mean that I was actually the one who signed for that project.

I could have signed off on it administratively for Dr. Gottlieb. At the time that went through, I could have been listed as the project officer for that project, but that could be subsequently changed.

Senator KENNEDY. What can we gather from the fact that it says, this project will involve realistic field testing of R. & D. items of interest to the CH/TSS. During the course of research it is sometimes found that certain field test experiments, or tests are not suited to ordinary laboratory conditions. At the same time it would be difficult, if not impossible, to conduct them with operational field tests. This project is designed to provide facilities to fill these intermediate requirements, it will be conducted by Morgan Hall, and we will have certain support activities.

You have signed it twice. It has your signature on it twice.

What should we gather?

Dr. LASHBROOK. Is that the authorizing document?

Senator KENNEDY. That is right. You saw this, it has those items typed, and it has Robert Lashbrook, Chemical Division, approved, Robert Lashbrook for Sidney Gottlieb. You have two signatures on there.

Dr. LASHBROOK. Does it have other signatures?

Senator KENNEDY. Yes; it has Mr. Gibbons.

Dr. LASHBROOK. All right.

As I think I was intimating a little bit before, I cannot make much sense out of what you have read. It was intimated before, I think, a large part of the documents that you have of this nature, are what we called boilerplate——

Senator KENNEDY. Excuse me?

Dr. LASHBROOK. Boilerplate. What was actually signed off on was not the same as the actual proposal, or actual detailed project.

Senator KENNEDY. How frequently do you use boilerplate? Do you sign off on things that are not relevant to what is really happening?

Dr. LASHBROOK. You have both. You have what you sign on, and the actual project, side by side.

Senator KENNEDY. Who has got the real file?

Dr. LASHBROOK. TSS.

Senator KENNEDY. Pardon?

Dr. LASHBROOK. TSS.

Senator KENNEDY. You mean this is not the real file. It is stamped top secret.

Dr. LASHBROOK. It is a real file. It is the one which goes through, receives the signatures, and is then filed.

Senator KENNEDY. It is what?

Dr. LASHBROOK. It is then filed.

Senator KENNEDY. It is a real file, but does not mean anything, is that about what you are saying?

Dr. LASHBROOK. It has administrative value.

Senator KENNEDY. It is not telling what the story is?

Dr. LASHBROOK. That is right. Not necessarily.

Senator KENNEDY. Not necessarily?

Senator SCHWEIKER. What is this, a cover file? Do we have cover files? Is that what we are dealing with?

Dr. LASHBROOK. In a sense, and in a sense it was done for security.

In other words, the files that went through the system ended up when the Financial Section—obviously TSS lost control of those files.

Senator SCHWEIKER. So the FBI had a "do not file" procedure designed to handle this sort of thing, and the CIA has a cover file system to handle it. In this case, though, some of the cover files contain pretty damaging information that doesn't seem to reflect well on the Agency's use of human subjects—I wonder what the real file contains.

Senator KENNEDY. The Agency has already admitted that the testing is going on.

Dr. LASHBROOK. Correct.

Senator KENNEDY. So this is accurate, they have indicated tests are going on, and this does say the tests will be going on, and it is approved. What is the extent of those boilerplate approvals or disapprovals that you make reference to? How routine is that?

Dr. LASHBROOK. They are summaries. It is a summary. Maybe that would be better.

Senator KENNEDY. But is the information accurate or inaccurate?

Dr. LASHBROOK. Probably it is reasonably accurate. I could not say, you know, at this point in time. We are talking about a generation ago, so I could not say.

Senator KENNEDY. Now, there is another authorized document I think you saw yesterday, for October 1953, same project, where you signed off on it. Is that boilerplate, too?

Dr. LASHBROOK. I do not recall which one you are talking about.

Senator KENNEDY. You are talking about boilerplate files that are not revealing in terms of their substance.

Dr. Geschickter indicated that a number of the files that represented his charges and reimbursements were completely inaccurate and distorted.

Another agent, Mr. Goldman, indicated that this was a procedure in the Agency itself, and we have heard it again, for the third time this morning.

It is our understanding from examination of these various files that this is the case in terms of boilerplate continuation of various projects, and reviewing many of these, you find almost the exact same language 10 years in a row. Maybe one word, or a second word is altered or changed.

Would you be surprised if that process was followed, and that procedure was followed?

Dr. LASHBROOK. Would I be surprised?

Senator KENNEDY. Yes.

Dr. LASHBROOK. No.

Senator KENNEDY. Why do you say that? You have been in the Agency, and evidently you have seen the way they write the reports.

Dr. LASHBROOK. Well, accurate records were kept, accurate files were maintained, yes. Now, such a thing as summaries were made, they are summaries, then if you are dealing with a summary, it is just that. But the paper that was just shown to me would be nothing less than a summary.

I could look at that, and I could say I do not really know what that paper is talking about. It does not say enough. It does not say much.

Senator KENNEDY. It does not say much. Does not a summary sum up information? What you are saying is, even though it might be labeled a summary, it is done in such a way that you do not know what it is really summarizing?

Dr. LASHBROOK. It might be a very brief summary.

Senator KENNEDY. But in terms of what you are saying here is that you are at least familiar with the process by which information is prepared in such a way as to not be either accurate or meaningful——

Dr. LASHBROOK. Not to be too revealing.

Senator KENNEDY. Where does that leave us? Do we assume that all the information related to these projects were actually destroyed, and that what we have here are documents with inaccurate, or unrevealing information?

Dr. LASHBROOK. I would not know. I am not sure what you do have.

Senator KENNEDY. Did you know the substance of the field test, about the testing of drugs, gadgets, on unwitting subjects in any safe house——

Dr. LASHBROOK. With Morgan Hall?

Senator KENNEDY. Yes.

Dr. LASHBROOK. No.

Senator KENNEDY. Or anyone else?

Dr. LASHBROOK. Not with any detail.

Senator KENNEDY. Do you know in a summary way, in a general way?

Dr. LASHBROOK. Secondhand, it would have to be very secondhand.

Senator KENNEDY. Secondhand from whom?

Dr. LASHBROOK. Various people who were involved.

Senator KENNEDY. From Mr. Gottlieb?

Dr. LASHBROOK. Possibly. At this point in time I could not pin down who. In fact, it is very difficult for me to identify exactly what I did know, or what I did not know, except that in detail I did not know.

Senator KENNEDY. You were the Deputy Director of the project?

Dr. LASHBROOK. Right.

Senator KENNEDY. Did you know what was going on in the projects?

Dr. LASHBROOK. Only on the broadest of details. I was not only Deputy Chief of the Division, but my primary duty was actually as a sort of project officer, in which I would have anywhere from 12 to, say, 20 projects of my own, which I personally was responsible for, and almost all of these were completely outside the area that you are interested in.

So, my own personal involvement, my own personal detailed knowledge of projects with Morgan Hall was quite minimal. There might be a time when I was——

Senator KENNEDY. What did you know. Why do you not tell us what you knew, in general terms, from whatever sources?

Dr. LASHBROOK. I knew that Morgan Hall set up a safe house in New York. That the purpose was somehow or other to utilize the safe house.

Senator KENNEDY. For what?

Dr. LASHBROOK. Interrogating, or talking to his informants. He was interested in using drugs of some type in this process. And I think that is all I really could say specifically on what Morgan Hall had in mind. It was mostly Morgan Hall proposing to the Agency that he do this.

Of course, his having a safe house, getting the most information he could from his informants——

Senator KENNEDY. These safe houses went on for a period of 14 years, did they not?

Dr. LASHBROOK. I would not know how long.

Senator KENNEDY. Well, they were in your division, you were the Deputy Director?

Dr. LASHBROOK. But I was not there 14 years.

Senator KENNEDY. But, you were Deputy Chief for a period of 4 years.

Dr. LASHBROOK. Perhaps. I was aware of the safe house in New York. In fact, I visited the place on two occasions. I was aware that it was going to San Francisco, but the details of actually what was being done, that I was not aware of, that I recall. I do not recall.

Senator KENNEDY. You wrote the memorandum that talked about a doorway constructed in a wall, a monitor testing surveillance equipment, a window constructed in the bedroom to permit visual surveillance techniques.

Dr. LASHBROOK. Right.

Senator KENNEDY. You wrote that memorandum. You approved accounts for microphones, recording equipment, listening aids, and a number of other materials in that. You wrote this other document.

Dr. LASHBROOK. Right.

Senator KENNEDY. You signed off on these particular reimbursement justifications?

Dr. LASHBROOK. Right.

Senator KENNEDY. But you do not remember anything?

Dr. LASHBROOK. Well, that was a generation ago, and if you had asked me—I saw those yesterday—if you had asked me without showing me any of those documents, I would say no, I do not remember, because I do not recall things in that detail a generation ago.

However, the first one you referred to, I was shown this yesterday, I read it over, and quite obviously to me it was a document prepared, because the auditor had disallowed some of the claims that Morgan Hall had made at the time he moved from New York. The title of it, well, I had contacted Morgan Hall to ask him to provide further justification for the items he disallowed.

One item Morgan Hall has been disallowed was a tip to the landlord. I reported that Morgan Hall said that that tip to the landlord was because he had knocked a hole in the wall, and so on.

In other words, that particular memorandum was strictly an administrative memorandum to justify, to attempt to help Morgan Hall justify his expenditures.

Senator KENNEDY. You were no stranger to the whole drug testing program?

Dr. LASHBROOK. No, sir.

Senator KENNEDY. Were you not aware of the program that actually involved Mr. Olson?

Dr. LASHBROOK Yes.

Senator KENNEDY. You have an awareness of drug testing in any event over a period of time?

Dr. LASHBROOK. Yes.

Senator KENNEDY. Particularly in the early days?

Dr. LASHBROOK. All I am saying is this particular operation of Morgan Hall is one that I really—I was not very familiar with at that time. What I did know at the time, I am sure I have forgotten much of it—there were some other things that I am personally more familiar with.

Senator KENNEDY. Do you have knowledge, or has anyone ever told you that prostitutes were involved in the safe-house operation run by Morgan Hall?

Dr. LASHBROOK. I think I recall having been told that, yes. I never quite figured how they entered in this, but yes.

Senator KENNEDY. I think there are others who have.

Dr. LASHBROOK. Yes; we have heard some testimony this morning.

Senator SCHWEIKER. Dr. Lashbrook, did experiments relating to hypnosis come under your direction?

Dr. LASHBROOK. I was familiar with some of the work that was done on hypnosis, yes.

Senator SCHWEIKER. In a nutshell, what was the general thrust of those experiments? I realize drugs and hypnosis were used together in some of them. What was the objective or purpose of that series of eight subprojects?

Dr. LASHBROOK. There were, of course, claims, or thoughts that maybe great things could be done with hypnosis. There was very little that could be pinned down as to what could or could not be done by this technique. So the only project that I recall on this was a very small project, one small project, in which we had a hynotist do some experiments primarily to see what the limitations of hypnosis might be, what could or could not be done with hypnosis.

We are trying to get some kind of answer as to—well, can you make a person do something under hypnosis that he would not ordinarily do against his will.

Senator SCHWEIKER. Can you?

Dr. LASHBROOK. I think our conclusion was that this capability is very limited.

Senator SCHWEIKER. What about projects relating to motivational studies? In his August 3 testimony, CIA Director Turner listed as category 7, "motivation studies, studies of defectors, assessment and training techniques". What would these 23 projects entail?

Dr. LASHBROOK. Assessment would come mostly under psychology, I think you probably covered that—it is an area that I would not have any great familiarity with.

In other words, I could not give, in detail——

Senator SCHWEIKER. What were we looking for in studies on defectors?

Dr. LASHBROOK. I do not really know. I do not recall.

Senator SCHWEIKER. You do not recall any of those projects. Did not any of them come under your——

Dr. LASHBROOK. Not that I recall.

Senator SCHWEIKER. How about training techniques?

Dr. LASHBROOK. Training for what?

Senator SCHWEIKER. I do not know. Admiral Turner just simply listed motivational studies, studies of defectors, assessment, and training techniques—23 subprojects in all—as part of MK-ULTRA.

Dr. LASHBROOK. That sounds like something that would come more under the category of psychology.

Senator SCHWEIKER. Training for what?

Dr. LASHBROOK. That is what I wonder. I do not know. I do not know of any good answer to that question.

Senator SCHWEIKER. Was Executive action in this category at all?

Dr. LASHBROOK. Executive action?

That term, I think, would perhaps have been covered pretty well in the previous testimony——

Senator SCHWEIKER. I know it was covered rather thoroughly when our former Intelligence Committee looked into it, but my question here is, did any training for——

Dr. LASHBROOK. Training?

Senator SCHWEIKER. Training for Executive action, was that included in any of these motivational studies?

Dr. LASHBROOK. Not that I am aware of. Not that I can recall, no.

Senator SCHWEIKER. So that the Executive action concept, political assassination, was not in any way involved in motivational training studies under any of these categories in MK-ULTRA, is that what you are saying? That is a pretty categorical statement.

Dr. LASHBROOK. OK. Repeat the question.

Senator SCHWEIKER. We know what our Intelligence Committee found that Executive action was, assassination of foreign political leaders.

Dr. LASHBROOK. Maybe I should have asked you to define the meaning of that term.

Senator SCHWEIKER. Now, some studies under MK-ULTRA were motivational studies, including assessment and training techniques. My question to you is, did any of the 23 subprojects listed in that category by the Director involve anything related to motivation for Executive action?

Dr. LASHBROOK. By Executive action, you mean assassination——

Senator SCHWEIKER. Assassination, plots against political leaders.

Dr. LASHBROOK. OK. No, none that I am aware of.

Senator SCHWEIKER. None that you are aware of?

Dr. LASHBROOK. I am not aware of any.

Senator SCHWEIKER. Are you aware of all the 23 subprojects categorized in Admiral Turner's statement?

Dr. LASHBROOK. I doubt it. I have not run through all 23 of them.

Senator SCHWEIKER. So you are not excluding the possibility? You are just saying that, as far as you are aware, none of the subprojects related to this?

Dr. LASHBROOK. Right.

Senator SCHWEIKER. All right. That is all.

Senator KENNEDY. Mr. Siragusa, what agency of the Federal Government do you work for and what position did you hold?

Mr. SIRAGUSA. I was with Immigration and Naturalization Service for 4 years as a clerk-stenographer, with the U.S. Bureau of Narcotics from 1935 to 1963.

Senator KENNEDY. Then you retired in 1963?

Mr. SIRAGUSA. 1963, I retired.

Senator KENNEDY. You were Assistant Deputy Commissioner of the Bureau of Narcotics?

Mr. SIRAGUSA. Later I was Deputy Commissioner.

Senator KENNEDY. Deputy Commissioner.

Could you tell us who Cal Salerno was?

Mr. SIRAGUSA. That was my cover name.

Senator KENNEDY. Salerno was an alias for you, and you became an agent for CIA, did you not?

Mr. SIRAGUSA. I was not an agent for CIA. I was liaison with CIA. I never worked for them.

Senator KENNEDY. You were liaison?

Mr. SIRAGUSA. Liaison, in my capacity with the Bureau of Narcotics.

Senator KENNEDY. Who gave you Cal Salerno?

Mr. SIRAGUSA. I had used the name Cal Salerno years before, from 1950 to 1958 when I worked overseas for the Bureau of Narcotics. I pioneered their foreign operations. At that time I did undercover work, and I used the name of Cal Salerno. I just carried on with that name later on.

Senator KENNEDY. OK.

Could you tell us what you had to do with the safe house in New York?

Mr. SIRAGUSA. Along about 1959, which was a year after I returned to Washington from Europe, among my many other duties in the Bureau, I was appointed unofficially as liaison with CIA. I was also liaison with the Hill in various other capacities.

Mr. Anslinger one day introduced me to Dr. Ray Treichler of the CIA, a very brief introduction, a very brief conversation. I was asked by Mr. Anslinger to take Dr. Treichler back to my own office. Dr. Treichler gave us the idea of setting up the operational apartment.

Senator KENNEDY. The CIA gave you the idea, is that right?

Mr. SIRAGUSA. Yes, sir.

Senator KENNEDY. What happened?

Mr. SIRAGUSA. We set up this apartment on 13th Street off of Sixth Avenue, and the understanding was that we were to use this apartment for our own purposes. That is, my office in New York City would use the apartment to interview informants, to debrief informants, to work undercover operations.

Then whenever the CIA wished to use the apartment itself, they would notify us to stay away from the apartment. Dr. Treichler was my contact man. He also furnished me with the money. We had an unfurnished apartment. He gave us the money with which to buy the furniture.

Senator KENNEDY. Did you ever have any idea of what was going on in the safe houses?

Mr. SIRAGUSA. No; I know it was being used for some intelligence purposes. One of my first guesses was perhaps it was being used to uncover defectors in their own organization.

If you are asking me if I ever knew or suspected it was being used for drug testing purposes, my answer would be no, I never knew that.

In fact, had I known that, had I even suspected that, I would have disassociated myself with that operation.

Senator KENNEDY. Why would you have?

Mr. SIRAGUSA. I was surprised to learn from news account about 2 years ago that the CIA was testing drugs on unsuspecting witnesses; that is contrary to my personal beliefs.

Senator KENNEDY. Did they ask you to set up a safe house in Chicago?

Mr. SIRAGUSA. No, sir, I do not recall that. I was asked that by one of your investigators. I do not recall they ever asked me.

In 1963, when I retired from the Bureau of Narcotics, I did so for the purpose of assuming a position of Executive Director of the Illinois Crime Investigating Commission in Chicago, which later became known as the Illinois Legislative Investigating Commission. I do not recall that Dr. Treichler or anyone else ever suggested that we set up an apartment in Chicago. Had the suggestion been made to me, I would have automatically turned it down because I had all I could do to handle my new duties in Chicago.

Senator KENNEDY. They never contacted you in Chicago?

Mr. SIRAGUSA. Dr. Treichler visited Chicago. In fact, after he left the CIA, he took a position with a chemical manufacturing company in Chicago, and several times he contacted me in Chicago. They were social visits.

Senator KENNEDY. Nothing to do with the agency?

Mr. SIRAGUSA. No, sir.

Senator KENNEDY. Why would a high ranking official of the Bureau of Narcotics be willing to play the role of administrative agent, paying rent and keeping the facility, and having no substantive contact whatever with the idea of the project and knowledge of how that project was carried out?

Mr. SIRAGUSA. My contact with the CIA was rather remote. The operation of the apartment was under the control of the District Supervisor in New York City. He handled all of that. I remained in Washington. I had very little to do with the day-to-day function of that apartment.

Senator KENNEDY. In the record of the MK-ULTRA Subproject 132, this is March 1964, it states the following:

> This project is conducted by Mr. Cal Salerno. Mr. Salerno, a public relations consultant, has recently moved his offices from New York City to Chicago, Ill. Mr. Salerno holds a top secret agency clearance and is completely witting of the aims and goals of the project. He possesses unique facilities and personal abilities which have made him invaluable to this kind of operation.

Mr. SIRAGUSA. There has been some poetic license taken with the truth. I left the Bureau of Narcotics in November 1963. I only just learned that the name of Cal Salerno was adopted by others that succeeded me. I had nothing to do with CIA during the period of time that I was in Chicago.

Senator KENNEDY. Well, the description of you then is completely inaccurate as being——

Mr. SIRAGUSA. Yes. I was not a consultant for the CIA. I never had any official capacity with CIA in any way whatsoever.

Senator KENNEDY. You were not, would you say, completely witting from the aims and goals of the project?

Mr. SIRAGUSA. I knew nothing about the project.

Senator KENNEDY. Then this report is inaccurate?

Mr. SIRAGUSA. It is.

Senator KENNEDY. We have heard from others—as a matter of fact, from each witness here, how the memoranda have been inaccurate. I am just trying to find out what the situation is.

Do you have any idea why they were trying to put the monkey on your back?

Mr. SIRAGUSA. I do not know that they particularly put the monkey on my back. Because in Washington in my era from 1958 to 1963, the entire bureaucracy of the Bureau of Narcotics, consisted of four men. I was one of them, and which bureaucracy has now been replaced by some 200 men. This is by way of explaining the fact that I had many duties that I had to assume without benefit of any official appointments. I was liaison with the media, with CIA, with congressional committees, with individual Congressmen. I had all to do just to keep my sanity.

Senator KENNEDY. But in the CIA files they have, the memoranda that you were completely witting, knowledgeable about these programs, the aims and goals——

Mr. SIRAGUSA. That is not so. That is entirely inaccurate. It is untrue.

Senator KENNEDY. Mr. Belk, what agency of the Government were you with? Where were you stationed?

Mr. BELK. I was with the Federal Bureau of Narcotics started with that agency in 1948. I assumed the position of Supervisor in New York City office in April 1963. Prior to going to New York, in the early part of April 1963, I had a meeting with Commissioner Giradono at that time, and he informed me I was going to New York as Supervisor in Charge. And during that conversation he alluded to the fact that the agency, that is the Bureau, had an apartment they were responsible for in New York. It was national security endeavor in collaboration with the CIA, and that he would wish me to continue that project. And that there was an agent in the New York office at that time, a man by the name of John Tagley, who was familiar with it and could give me much of the detail.

When I arrived in New York City, I took over the office from Mr. John Enright, who I believe was aware of the fact that the apartment existed.

I certainly got a briefing from Mr. Tagley on where the place was and what it did look like. I was told we can use the apartment for operations, and that when the CIA was going to use the place, that we would be notified in advance that they were, and that we would stay off the premises.

Senator KENNEDY. What knowledge did you have about what was going on inside the safehouse?

Mr. BELK. In terms of the CIA using the safehouse?

Senator KENNEDY. Yes.

Mr. BELK. I had no knowledge at all of what they were doing there. I know we used it on a couple of small operations. In fact, as I recall, in 1964 I recommended to the Commissioner that we close the place

and get out because I did not think the cost of it was justified, what we, that is the Bureau, was getting out of it.

Senator KENNEDY. Did you have any qualms about paying all the bills for a project you knew nothing about?

Mr. BELK. No. It was an assignment. It was a national security thing. We were helping another agency and paying bills.

But in terms of the Bureau's use of that place, I did not think it was justified. I did not know what they were doing there and how frequently they used it, and I wanted to get out from under it.

Senator KENNEDY. Your original work for the agency, Mr. Belk, was part of MK-ULTRA, is that right?

Mr. BELK. I did not even know what that was. Never heard of it before until the last couple of days.

Senator KENNEDY. We have documents, memoranda from the agency itself that have references to your involvement, not dissimilar to the kind of characterization of Mr. Siragusa's involvement. But I understand from what you said here that you would deny that categorically, is that correct?

Mr. BELK. I would do stronger than that. It is a lie.

Senator KENNEDY. OK.

Mr. Feldman, we are going to recess the hearing until tomorrow and hear your testimony. We are going to have to start at 8 o'clock tomorrow morning to accommodate Admiral Turner.

I want to thank all of you—Mr. Belk and Mr. Siragusa particularly. I think we are very mindful of the very extraordinary work that you have been involved in for the Bureau. I just want you to have a very clear understanding that my interest in this is how the Agency has used different agencies and, in many instances without the knowledge of those people being used. We have seen it in the National Institutes of Health, and we saw reference to it in terms of IRS, and it has absolutely no reflection, of what I understand from my reading of your records in the Bureau of Narcotics, on your very commendable careers.

I want you to understand that, and what the purpose of this particular area of inquiry is, because this involves your career people, and I know that your career means a lot and that your service means a lot, and there should not be anything that reflects on that contribution.

So, thank you very much.

We will resume at 8 o'clock with Admiral Turner in room 2228.

[Whereupon, at 12:20 p.m., the subcommittee recessed, to reconvene at 8 a.m., Wednesday, September 21, 1977.]

HUMAN DRUG TESTING BY THE CIA, 1977

WEDNESDAY, SEPTEMBER 21, 1977

U.S. SENATE,
SUBCOMMITTEE ON HEALTH AND SCIENTIFIC RESEARCH
OF THE COMMITTEE ON HUMAN RESOURCES,
Washington, D.C.

The subcommittee met, pursuant to notice, at 8:05 a.m., in room 2228, Dirksen Senate Office Building, Senator Edward M. Kennedy (chairman of the subcommittee) presiding.

Present: Senators Kennedy, Schweiker, and Chafee.

Senator KENNEDY. We will come to order. We welcome as our first witness this morning Admiral Turner, who is the Director of the Central Intelligence Agency, and his associates. We appreciate his presence here today to respond to the committee's areas of concern, and I might just, at the outset, mention the particular areas that we are concerned with.

We have received additional materials from the Agency since our last hearing, and we want to know what the process was for finding those. It seems that it is a never-ending process of finding new material. We heard a great deal yesterday from a number of the former agents of the Agency that questioned the accuracy of documents and memoranda within the Agency. They talked about two sets of files. They talked about boilerplate language; summaries that were not revealing, except with those that had some very special insight. We want to hear from the Director about that observation that was made by a number of the former agents.

We want to hear about the appropriateness of the relationship between the Central Intelligence Agency and the other agencies of Government, as well as private institutions; what does the Director believe is the appropriate relationship between the Agency and universities, and what is the appropriate relationship between the Agency and other agencies—the Bureau of Narcotics, the NIH, the IRS, and others—and how will that be developed, how it is viewed at the present time, and what comment the Director might say about that, in terms of the past.

I am absolutely convinced that if we had those materials, that were in existence in 1975, which were referred to within the Agency in this whole area of experimentation, this committee, as far as our interest, would have wound up its area of inquiry a long time ago.

And I suppose the most important area that we are interested in hearing from the Director, is the disparity of responsibility between the Agency and the Department of Defense; the areas of MKSEARCH and MKULTRA, and MKCHICKWIT. We know that aspects of the behavioral research started in the early 1950's and continued, to one extent or another, through 1973.

The various projects were turned on and turned off in a never-ending web, at least for that 20-year period of time, especially the most recent ones from the late 1960's to the early 1970's, the followups, in MKSEARCH, in MKULTRA, and in MKCHICKWIT.

In the course of our hearing, we asked the Director, specifically—and I am reading from the record—in a question by myself: "In the followups, in the Mksearch, and the Mkultra, and Mkchickwit, could you give us, also, a report on those particular programs?" Admiral Turner said, "Yes, sir."

"Did they involve experimentation?" The Admiral indicated, "No, sir." Senator Kennedy: "None of them?" And then, Admiral Turner said. "Let me say this: That these programs are code names for the CIA participation in what was basically a Department of Defense program."

So, we inquired from the Department of Defense about their knowledge and understanting of these programs, and for a complete report. Last evening, we received the correspondence from the General Counsel's Office from the Department of Defense, and we will make the letter a part of the record.

[The information refered to may be found on p. 157.]

Senator KENNEDY. In the letter—and I will read just the relevant parts:

I have enclosed a copy of memoranda and copies of the documents retrieved by the DOD. It appears from the available documents that the projects Mksearch, Mkorphan, and Mkchickwit were directed, controlled, funded by the Central Intelligence Agency, and much of the participation of the military departments was solely as a conduit of funds from the Central Intelligence Agency to outside contractors.

And then, in the operative memoranda for the Secretary of Defense, prepared within DOD, on page 2, it continues:

It appears from the document that these three code word projects of the Central Intelligence Agency, identified by the Director in his testimony as basically Department of Defense projects, were, in fact, planned, directed, and controlled by the Central intelligence Agency,

and then it continues:

Each of the projects are described below.

So, what we have is, in the followup programs that took place over the period of years that brought us into the more recent period, from 1973, we have the real questions of accountability, and who is directing, who has control, who has review responsibility, and what kind of oversight is being exercised on this particular program. Then, we have both the apparent and direct conflict from the two agencies that were involved in this program as to the responsible agency. We are looking forward to clearing that particular issue up this morning.

And to do that, having the testimony of the Director on these areas will obviously be extremely important and will be extremely helpful. We hope that we can resolve those particular questions with a degree of finality today, so that we may go back to our other legislative responsibilities.

Finally, I would just like to say, after we hear from Admiral Turner, our next witness, Dr. Gottlieb, who, at the request of Dr. Gottlieb and his attorney, for medical reasons, has requested that he be permitted to testify in a less crowded room. His testimony will obviously be made public and will be piped live into this room. He has a medical condition

which we have verified, independently, and we will follow that procedure. It is an unusual request, but obviously we are interested in getting his testimony, and we are also interested in his well-being and his health. So, we will have the meeting in the next room with him, and it will be piped live in here after Admiral Turner.

Senator CHAFEE. I would just like to say, Mr. Chairman, that I, personally, want to extend our thanks, and I believe I speak for the committee, to Admiral Turner for all he has done in digging out this material. I am on another committee where Admiral Turner often appears before us, and I think it is marvelous the way Admiral Turner is able to appear at different committees. I hope some time is left over for him to run the Agency, because the demands of the Congress upon his time are certainly strenuous.

And, of course, as you all know, the matters we are investigating happened long before his watch. We are digging up material about activities that took place many years ago and, Mr. Chairman, I think you agree with me that we have to get on with it and get these hearings completed so Admiral Turner can devote his time to matters of pressing importance to this country at this point.

Senator KENNEDY. Fine. Well, as the Senator from Rhode Island understands, the last human testing that took place was in 1973. So, it was over a 21-year period, and I do not know how many times we have been told that the various programs were turned off, just to spring up again. We are told that in the most recent tests by the Agency, itself, that they were conducted by DOD; and DOD, in their testimony here today, say that the tests were conducted by the Agency.

I am very hopeful that we can resolve these questions. I think that the extraordinary fact is that these matters have come to light. In no other country would they have come to light. And I do not question that there are many other things that have been done in other nations that never would be known, but we do know, and we are interested in the protection of human subjects. We have every intention, to the extent that we can from a legislative point of view, to support what is the statement of Admiral Turner, and that is that he is committed to the protection of these human subjects. He has commented on and testified to that in the past.

Admiral Turner, we would be glad to hear from you.

STATEMENT OF ADM. STANSFIELD TURNER, DIRECTOR, CENTRAL INTELLIGENCE AGENCY, ACCOMPANIED BY HARRY E. GORDON, OFFICE OF RESEARCH AND DEVELOPMENT; RAY REARDON, OFFICE OF SECURITY; FRANK LAUBINGER, OFFICE OF TECHNICAL SERVICES; ALAN BRODY, OFFICE OF INSPECTOR GENERAL; AND LYLE L. MILLER, ACTING LEGISLATIVE COUNSEL

Admiral TURNER. Thank you, Mr. Chairman. Thank you, Senator Chafee, for your remarks I appreciate the fact that both the chairman and Senator Chafee have reminded us that the activities about which we are talking today are part of the history, not the current activities, of the CIA.

And if I might make one point, while there may have been drug testing as late as 1973, we have no evidence of unwitting testing of drugs on human beings past the period of about 1964. So, this is a historical matter, and as I have said to you before, Mr. Chairman, we are not doing this kind of thing, in terms of unwitting testing on human beings with drugs, at this time, and I will get into that in more detail in a moment.

I would like to preface my remarks, also, by saying that I feel it is very unfortunate that some of the media and other sources have drawn the inference from the testimony in the recent days that there may have been deliberate withholding of material by the CIA, either in 1975 or as recently as July and August of this year, and I categorically deny that for this year, because I was here and I know that it did not happen. I have no reason to believe that it happened in 1975, and I would point out that we volunteered the information in July of 1977. If it had been deliberately withheld, I suppose it would have continued to have been withheld.

We did discover more material in August, after our initial voluntary revelations in July and, clearly, we did that voluntarily, also, not because we were withholding it in July and suddenly decided to release it in August. I pledge to you that I have made every effort, and my staff has, too, to be as forthcoming with you and your staff as possible here in providing information.

Rather than read a prepared statement, Mr. Chairman, let me just address your four points of concern and move on with them as quickly as I can. How have we come to this process of finding the additional materials? Well, we came because on the 3d of August, you asked me, and I promised, to find and furnish any materials we had on MKSEARCH and on OFTEN/CHICKWIT, as well as providing you some additional details on safehouses in San Francisco and New York that were engaged in MKULTRA, which was the subject of our previous testimony on the 3d of August.

We provided the information on the 1st of September about MKULTRA. Immediately upon returning from the previous testimony, we started reviewing what limited material we had on MK SEARCH, and trying to see where there might be more. If you will recall, the ULTRA documents were found in our archives, located outside of Washington, D.C. However, we had checked previously and found that there were no MKSEARCH materials in those archives under the financial filings, which is there we found the MKULTRA material.

The gentleman on my left, who had found the MKULTRA materials, then did a very diligent job of Sherlock Holmesing and said to himself:

> If they were found under financial filings in the archives, perhaps I should check all the financial holdings of that area of the Agency in our Langley headquarters.

He did so, and on August 15, came up with additional materials on MKSEARCH, as well as 12 extra files on research grants, which are not technically part of MKSEARCH, but related to it.

Mr. Chairman, the process of finding materials that are ferretted away in these files at the headquarters, in these files at the archives, is not easy, and there is no way I can look you in the eye today and say there will not be some more turn up this afternoon. I can only

assure you we have nothing more on these subjects known to us at this time, and I am pleased at the diligence of our people in looking and I am pleased that each time something does turn up, it immediately comes forward and we make it known to you.

Next, you asked about the accuracy in some of the allegations——

Senator KENNEDY. Maybe I could just refer to this in greater detail. Our committee began its inquiry in 1975. It is apparent from some of the documents released to us last week, that documents were available that could have been helpful to us in 1975. One of the documents was made available to the Church committee at that time, but not to our committee until recently, and I am referring to the memoranda for the IG on Subproject 3 of MKULTRA, dated February 10, 1954, which describes the project involving the testing of drugs on unwitting persons, the use of electronic and photographic equipment, the liaison with a narcotics agent by the name of Morgan Hall; the names of the drugs he administered. The last list of four drugs would have been useful in 1975.

In the material provided several weeks ago, we noticed a buck slip that was found in 1975, and it was handwritten in 1975, and it says,

The attached package should be of interest to you in connection with the relations with BNDD regarding arrangements on East and West Coasts; see, particularly, the January 30, 1967, Gottlieb memo.

So, this was obviously obtained in preparation for our hearing in 1975. There was a Gottlieb memorandum which still was not included in the package given to us. We certainly did not have it back in 1975, and there were other memos from August 25, 1975, indicating that there had been inquiries concerning possible employment of Ira Feldman, and these documents were not provided prior to the August 3 hearing, when we were trying to put the maximum light on these subjects.

So, I want to be very specific. We have mentioned these to your staff in preparation for these hearings, so that you would be aware of the program. But, those were the references. I am convinced that with regards to the memorandum from Gottlieb, that with that information, we could have had all of this really behind us and we would not have to be back here, in terms of our particular interest. With what we are interested in, I am satisfied, but those were the documents that we referred to in my opening.

I think the areas in which we would be most interested, Admiral—and we will include your statement, obviously, entirely into the record—I think is this basic kind of conflict. I wonder if you could address it. You indicated from your testimony here, that the follow-on programs—I mean, we are talking about the early history, which was on unwitting; the later history, was on witting subject. We are obviously concerned about that, as well, in terms of the kind of information that is available to agents in order to make an informed judgment and decision about various kinds of testing.

That is, obviously, of great concern. We have seen in the past where even witting subjects were not given the full kind of information needed in order to make an informed judgment.

Now, that particular document—I am sure you are familiar with it now—where you indicated that those studies, or those tests, or those projects were being done by DOD, and DOD's response, was that they were being done by the Intelligence Agency—and this was

as of last evening. I mean, this is your Agency and DOD reviewing the same kinds of material, and each saying that the other had responsibility on it, and what we are trying to do is to put it to rest, so we know who had the responsibility, who had the authority, and I am wondering if you can help us on that.

Admiral TURNER. My agency has full responsibility for MKSEARCH, OFTEN, and CHICKWIT, and I do not believe there is a conflict between us and the Department of Defense, and I do not even believe there is between my statement on the 3rd of August, but on the 3rd of August, I was here to testify on MKULTRA. I knew very little about MKSEARCH, and the Department of Defense, I think, at that time knew less, because these documents are incomplete and none of us had been reviewing them at that point.

I find myself in no conflict with them at this time. MKSEARCH and OFTEN/CHICKWIT were CIA projects. They were part of a larger envelope which included a Department of Defense program, but not Department of Defense responsibility for those particular subcomponents. A part of the activities of some of those components was funded through Department of Defense agencies, and, most specifically, the Edgewood Arsenal.

I take full responsibility for anything done in SEARCH, OFTEN/CHICKWIT.

Senator KENNEDY. Was experimentation on human subjects part of that program?

In your testimony, just earlier, there was, obviously, the CIA participation in what was basically a DOD program, and the DOD indicated that it was your program and you are taking responsibility for that this morning. The other question is, did they involve experimentation in human experimentation, and your response to that was, "No, sir," and they did. They did involve human experimentation.

Admiral TURNER. I have two experts on my left; one on OFTEN/CHICKWIT, one on SEARCH. Ed Gordon, would you talk about human——

Senator KENNEDY. Would you just identify yourself, please?

Mr. GORDON. I am Ed Gordon. I will address the OFTEN/CHICKWIT. CHICKWIT was, as stated in some of the material you have, a program to get foreign drugs, information on foreign pharmaceuticals, developments in Europe and the Far East. There was no testing scheduled, and our records indicate that there never was any testing of any kind under project CHICKWIT.

I would like to point out that CHICKWIT does not have the "MK." There has been a misunderstanding. So, it is just plain CHICKWIT.

Senator KENNEDY. It does not surprise me, because when we tried to find out about MKULTRA, it was very clear what our interests were; it was and is on human experimentation, and, obviously, on unwitting experimentation. These are our interests. We made all the requests on MKULTRA and got a response that this was the end of project MKULTRA. Then we found that the projects have changed, in names, to either MKSEARCH or MKOFTEN, or that the code name has been dropped on it. We had difficulty in getting information, because we did not make the exact kinds of requests for the information on these projects since their code names were changed. So you see our difficulty.

The Director responded that there was no human experimentation in those programs. Now, I understand that there was human experimentation in MKOFTEN.

Mr. GORDON. In project OFTEN, Senator, there was human testing involved. To the best of our knowledge, that was part of an ongoing DOD program. We identified a single compound which we were interested in as a defensive mechanism, because we knew that foreign intelligence people were using it.

We believe, from the evidence we have, that though the testing was fully intended on that compound, that the project was stopped in January of 1973, before any human testing for Agency was conducted.

Senator KENNEDY. I see. So, your point is that they intended to test it on humans, but actually they ceased it before it was tested?

Mr. GORDON. Yes, sir.

Senator KENNEDY. Well, the log of the tests here have June 1973, a period of four tests; two tests, two people each. Are you familiar with those?

Mr. GORDON. Senator, I am familiar, in that the Defense Department, in telling us the things that they had found out, said that there were two tests in June of 1973 on two military volunteers, and in the draft that I received on that, it said that it was wholly sponsored and funded by Army research and development. We have no results.

Senator KENNEDY. Yes, but you just said there was not human testing, before, as I understood the——

Mr. GORDON. Sir, I said under Agency sponsorship.

Senator KENNEDY. Oh, under Agency. The thing I am confused about is that we have the records of testing of those four; two tests of two individuals each. You say that there was not any testing, as far as the Agency is concerned. The Admiral assumed complete responsibility for the totality of these programs, just 4 minutes ago.

And, now, we have the DOD statement—their comments—saying that these matters were directed, controlled, and funded by the Intelligence Agency, and that they were the conduit of funds. Now, I am just trying to piece it together here.

Mr. GORDON. Sir, I can understand the confusion. I can only again say that I was aware of only one of those tests in June of 1973 that I was given to understand were two, and that they were done by the Department of Defense under Army's research and development. As such, they would not have been part of the Agency's project OFTEN.

Senator KENNEDY. Now, in one of the CIA documents on drug research you indicate Agency support for the clinical testing and collection of information on, and samples of, foreign drug developments, which terminated in January. Because of prolonged aftereffects, additional charges to the contract were made after this date for the necessary post-test follow-up observation and examinations of the volunteer.

Mr. GORDON. Yes, sir.

Senator KENNEDY. There is a volunteer.

Mr. GORDON. I acknowledge there is conflict, but I cannot explain that. We have nothing in our records that indicates that there was the kind of testing that we were interested in, or CIA-sponsored

testing. We do know that there had been testing on this particular compound prior to Agency's saying, "Can you test it for us in this fashion?" We asked for a specific kind of application.

Senator KENNEDY. Well, this is your document, not DOD's document.

Mr. GORDON. Yes, sir.

Senator KENNEDY. It talks about a follow-up on the volunteer, and your testimony is that there was no human testing?

Mr. GORDON. We have nothing beyond that information.

Senator KENNEDY. And, yet, the documents that were provided for us, against some background yesterday, where we heard from other agents who talked about the value of the files that are kept by the Agency, seems to indicate otherwise. I mean, if you are confused, you can imagine how we are on this.

Mr. GORDON. Yes, sir, I certainly can.

Admiral TURNER. May I interrupt, sir?

Senator KENNEDY. Yes.

Admiral TURNER. I want to make it perfectly clear, Senator Kennedy, we are not professing to tell you the complete story of these activities. We are professing to tell you the complete story that we know. These records that we have uncovered are financial records. They do not tell the story; they tell pieces of it.

Senator KENNEDY. The thing, though, Admiral Turner, having tracked this the best that we could from the origins of the program, we are now up to 1973. There are people around who were involved in that program. In dealing with the early part of the 1950's, it is a little more difficult because the people who were involved in those programs are deceased, and we can understand that.

But, now, we are talking about the people who were involved in it in 1973 and we have direct conflicting testimony on the nature of this program, both from the Central Intelligence Agency and the Department of Defense. Now, is that not the case in terms of the material that we showed you in preparation for this hearing? The Department of Defense is in basic conflict with what you are telling us, in terms of the nature of the program? And we have just seen an example of that, in terms of my questions here.

Now, do you understand that; that there is a dilemma that we are confronted with at the present time?

Admiral TURNER. I do not sense a great sense of conflict between us and the Department of Defense.

Senator KENNEDY. Well, will you explain for me, then, why, in your testimony, you tell us that you have full responsibility for that, and Mr. Gordon says that there was no human testing, and then in the file here, it shows that there were four testings, and we will give you the dates on those programs?

Admiral TURNER. It is my understanding that is done under the Army program, not under the CIA program.

Senator KENNEDY. And the Army says, specifically, "The projects the Director defines in his testimony as basically Department of Defense projects, were, in fact, planned, directed, and controlled by the Central Intelligence Agency." Now, that is from the DOD; we got it last night; directed control, and that the military departments were solely a conduit of funds from the CIA to outside contractors.

Now, that is 1973. That is just a few years ago, and that is why we have difficulty on it, and I imagine you have difficulty, too.

Admiral TURNER. I have great difficulty. I am happy to ask the General Counsel of the Department of Defense, who is in the room, to come up and help us clarify this thing. I am not trying to hide anything. If there is confusion here—I do not understand it that way. I do not understand this statement; I have never seen it or heard it before you read it.

So, if she would like to come up, we will try to straighten it out between the two of us.

Senator KENNEDY. Well, I do not want to take away from your time. Does the Counsel just want to make a reference to that at this time, or if you want to be more elaborate on this, we will give you a chance.

Ms. SIEMER. Well, we will appear before you later on this morning, Senator. We do not know any more about it than the admiral does. We have the same records, and we come to a different conclusion. Our conclusion is that the testing that was done was part of a project that was tested by the Agency. We have no additional documents and no additional records, other than those that are available.

Senator KENNEDY. Then, we will wait. As I understand, you have the same documents as the Agency has and you both reached different conclusions, in terms of responsibility.

Ms. SIEMER. We have provided our documents to Admiral Turner. I apologize over the fact that they were not provided to him until 2 days ago, and he has not had an opportunity to look at those and try to analyze them. That is my fault, because it took us a long time to get them out of our files.

Senator KENNEDY. Well, we will hear from you later on. But, the problem, as we see it, is in this follow-on testing, and over the course of our investigations, we see the various kinds of drug testing assuming different names; it is the MKULTRA, MKSEARCH, MKCHICKWIT, MKOFTEN. Whether they have "MK" before them or not, there is a continuing program for a period of some 21 years, up to 1973, with unwitting and, then, witting subjects.

The matter that we are obviously concerned with is the issue of accountability; people wonder how these programs go on and continue. You are not going to be able to halt a program, or review it, or protect the people who are involved in it unless we know who is in charge. We have direct, conflicting testimony from the two agencies of Government that have responsibility in this area, that is the Agency and the Department of Defense, and that is where we are at.

Admiral TURNER. Well, we are happy to try to sort it out. I have just been handed what I am told is the DOD document that you are referring to, and in tab G, last page, there is a statement which—and this is a DOD document, not mine—it says:

> In June, 1973, two military volunteers were tested at Earle—that is an army depot—with EA-3167, but these tests were funded by army RDCE funds, and they are not connected in any way with the CIA project.

I do believe I am responsible for OFTEN/CHICKWIT. I do believe that we funded some things through the Army under OFTEN/CHICKWIT, and that the Army did other projects which were not part of OFTEN/CHICKWIT, but were in the same area and related

to it, and that this testing of human volunteers was in that latter category of an Army project closely related to OFTEN/CHICKWIT.

Senator KENNEDY. Well, we will move on from this. I will yield to Senator Schweiker on it, but we will try and get the staffs of your department and DOD with the same material, since we all agree that we have got the same documents, so that we can at least get a resolution about it. I think that is going to be important.

We have the remaining areas, which we are going to review with Admiral Turner, but Senator Schweiker has an area now.

Senator SCHWEIKER. Well, I have another example the same exact sort of conflict between your CIA testimony at the last hearing and the information we now have, Admiral. I want to preface my remarks by saying I commend you for releasing the initial documents. I know it was not an easy thing to do; and I know from having served on the former Intelligence Committee, that that committee could not even get the information at all. So, I think you have to be given credit for providing us with the documents.

But, I want to bring up another instance of the same type of conflict that Senator Kennedy just brought up with regard to other projects. When I questioned you last time you were here, I asked you about subproject 54 on brain concussion. One of your aides gave a brief reply, and you promised to find out what you could about it and supply it to us.

We have not had too much success in getting any additional information, except, I think, at the last minute, we were told the CIA really did not have control of this project: It was handled by the Office of Naval Research; it was basically their project. The CIA phased it out.

Well, here we have, again, in the Defense Department's, testimony, dated September 20th, what appears to be a contradiction. Here is what DOD says about it:

> This project began in October, 1954 and was terminated, at least with respect to the Navy, in December, 1955. It was performed by a contractor located in California. The involvement of the Navy was primarily as a conduit of funds from the Central Intelligence Agency to the contractor. A small amount of Navy funds may also have been used for this contract. In December, 1955, this project was terminated as far as the Navy involvement was concerned, and it thereafter, apparently became subproject 54 in the MKULTRA project.

We are faced with a real dilemma in pinpointing responsibility and authority as to what happened. Here is another classic example where, initially, you folks said, no; it was funded and run by the Office of Naval Research; it was their project. That was the only information you could supply to us about the project. Now, the Defense Department is saying just the opposite.

How do we pinpoint accountability and responsibility? How can we tell who was in charge?

Mr. LAUBINGER. Senator, I would like to make a few comments to that, since I answered your question before on 54. We furnished the committee with all the project folders on MKULTRA, including 54, complete.

Senator SCHWEIKER. I want to compliment you for that. I think it was critical to our attempts to sort out what went on in the MKULTRA projects, I think we should compliment you for doing that.

Senator KENNEDY. Would you identify yourself, please?

Mr. LAUBINGER. I beg your pardon, Senator. I am Frank Laubinger with the Office of Technical Service, which was formally TSD, Technical Services Division. I testified before with the Admiral on MKULTRA.

On project 54, it has got a rather sensational proposal in there, in terms of the work that they propose to do, and you asked about the proposal and I said, in fact, it was never funded under MKULTRA. Now, I overlooked—at least, my memory did not serve me correctly when I went through that file folder to see one memorandum dated January 10, 1956, which makes it quite clear, as a matter of fact, that that proposal was based on prior work that was funded by the Agency.

Senator SCHWEIKER. By whom?

Mr. LAUBINGER. By the CIA. So, that information was in their file folder. It did not happen to be in my head when I testified.

Senator SCHWEIKER. I think I might have read part of that memo to you at the last hearing. That is why I argued with you at the time, because I think I had documents in front of me, as I recall, which clearly indicated CIA involvement. I did read that to you. You did supply the documents to us. There is no argument about that information, but you seemed to be denying what appeared clear from the documents and persisted in denying it until this morning.

Mr. LAUBINGER. Perhaps I am sort of headstrong, myself, and in my own view, I am reading under the ULTRA project, that if it had been funded under ULTRA, it would have had a project number and identified as such. The thing that threw me was that it was funded, apparently, outside of any MKULTRA activity and it was under the normal contracting process, so that it was not included in MKULTRA as any work done under that funding umbrella.

The file folder that you have and I have, right here, makes it quite clear, however, that 1 year's work was done through Navy funding—a Navy funding mechanism—on which the proposal was based that ultimately came into the MKULTRA program. That second proposal was never funded. So, there was conflict and I, personally, I think, introduced a little bit of confusion in that in my testimony.

Senator SCHWEIKER. Well, do you agree or not agree with DOD's statement here that even though the initial funding went through Navy, the Navy was really acting just as a conduit for the CIA?

Mr. LAUBINGER. I think that is correct.

Admiral TURNER. Would you like me to address your other basic points, Senator?

Senator KENNEDY. Yes; if we could go to the quality of the nature of the files of the Agency, and the kind of information that is getting up through the system. Maybe you would want to make a general comment about those allegations and charges which we heard from the four witnesses to the effect that many of the descriptions of ULTRA projects contained in the files, for which they were responsible, were not accurate. The witnesses referred to these descriptions as boilerplate descriptions. One went so far as to say that some of the records were intended to be misleading. Mr. Lashbrook even implied that there would be two sets of files; one with a complete, accurate description; one without that.

Would you comment on the recordkeeping activities of the Agency, and do you have requirements that project approval be based on accurate memoranda which actually reflect what has been done and what is intended to be done? Do you have double bookkeeping? And why do so many witnesses take issue with the substance of the documentation?

Admiral TURNER. There is lots of confusion about the files at the CIA. I have no indication that anyone has kept deliberately inaccurate files. I think when people refer to inaccuracies in this particular context, they really should be using the word "incomplete". We mentioned from the beginning that what we are telling you is incomplete, through no fault of our own at the moment.

There are systems at the agency, quite proper, where we have what we call working files and official files, and there are lots of good reasons for having working files. And, sometimes, people who do not understand the system try to portray that as a duplicate—perhaps, false, incomplete, or otherwise—distorting file.

The working file generally is an incomplete file, and one of the main reasons for that is that we are dealing in a world of necessary security and secrecy. And if the man on my right is working on a part of a project, whether it is one of these or anything else, he will develop a working file from which he operates, and we do not want it to have the things that belong to my man on the left, if he is working on a different part of that project and the two of them do not need to know each other's part.

In order to keep the secrecy as tight as we can, the working files will be different and each will be incomplete, for good reason. In addition, we keep working files as a matter of convenience and as a matter of insuring that the official file does not get torn apart, separated, lost, or destroyed in any way.

So, the fellow that has got to have it in his hands and maybe take it with him to meetings, he takes a copy, which is called a working file. I think that is what the witnesses yesterday, if they were not being self-serving, were referring to when they suggested we had duplicate files. But, again, I have no way of guaranteeing, Senator, what people put in the files in the 1950's and 1960's.

I only say that I have looked into the system as it exists today in the agency, and I do not find any evidence of people keeping files for the purpose of distorting the facts to people who have the right to get into them.

Senator SCHWEIKER. Do I understand—and I realize this was before your watch—that a file, whether official or working, would not be prepared with the purpose of distorting the project or obscuring or hiding the facts?

Admiral TURNER. I have no evidence of that, Senator. As I say, I cannot tell you——

Senator SCHWEIKER. We came across the Dr. Geschickter case yesterday. He pretty well denied the essence of what was in the files. For example, the files said there was to be a memorandum of agreement between the Agency and Dr. Geschickter on subproject 35, and that he was completely writing off the terms of the agreement yesterday, he denied ever knowing of such an agreement at all, denied ever seeing a memorandum of agreement, and denied signing a memorandum of agreement.

Admiral TURNER. Well, I have not read Dr. Geschickter's testimony. I have been told a little bit about it. It is my understanding he said that we gave $335,000 to Georgetown University, or to his foundation for the Georgetown University; that we neither got nor asked for any services in return for that, and I just find that an utterly incredible allegation for anybody to make.

I cannot imagine any official of this government giving away $335,000 and not asking for something in return.

Senator KENNEDY. Well, did you get anything in return?

Admiral TURNER. We do not know what we got.

Senator KENNEDY. Well, that is the point. If you had other kinds of documents or information on it, you might have some idea, but you really do not know. It is incredible to us that they gave it away.

Admiral TURNER. I did not say he was incorrect.

Senator KENNEDY. Right.

Admiral TURNER. I said it was incredible that it could happen. I cannot believe it. I think he was mistaken.

Senator KENNEDY. I dare say that it was somewhat more severe, in terms of the criticisms of the recordkeeping. Mr. Goldman indicated that he was ordered by his superiors to justify the continuation of a program and to file a statement that would justify it, which was not based upon the merits of that particular program.

They talked about boilerplate language that was used for the continuation of the program. In one memorandum for the record of Mkultra, it says:

> This project was conducted by Cal Salerno, who holds top secret agency clearance and is completely witting of the aims and goals of the project.

Mr. Salerno swore in his sworn testimony that he was shocked to hear that. He testified he never knew the aims or the goals of the project.

More recently, in the Mkabate, which is another program—a subdivision of one of the other MK's—in January of 1972 the notation of it says, "authorizing Mkabate dated 1964, I think we should update, since new DCI"—new Director of Central Intelligence Agency—then signed by the person.

Right underneath it—this is obviously the superior—"No action by TSB/BF, per telecon with"—another agent. Then, the agent, evidently, is not satisfied and, later, on January 18, 1972, it says: "Call, reference need for an update of Mkabate activity approval." And then, he continues, "DCI approval 1964, why update due to change in DCI's?" And then, under the bottom from the superior, "No action required."

Now, how would you even know that these things were going on? This is in the one area, in terms of human experimentation, that the new Director was going to get any kind of information. How do you know, really, what is going on, if you have got people as recently as that, and that is in 1972? I imagine some of these people are still there.

Admiral TURNER. Senator, I have no comment. If Mr. Horowitz had included that on the list of material he wanted me to prepare for, I would have. I have never heard of Mkabate until this time.

Senator KENNEDY. We just received that this morning, and it is just relevant to this particular area.

Could we go to the relationship with the other agencies?

Admiral TURNER. Yes, sir. We have very clear rules on these. You asked about universities. We have an internal regulation issued in February of 1976 that we will have no contractual relationship with a university that is unwitting to the university.

We do not have any relationships with other agencies of the U.S. Government which are unwitting to the appropriate people in those agencies, and in your area of health care, any remotely related health item that we get involved in today—psychology, and things like this—we have to get a serially numbered approval from the Department of Health, Education, and Welfare, and they are, therefore, fully witting. And we do not get into this kind of area without it being approved by the proper health authorities in the Government.

Senator KENNEDY. You do not believe, nor is it the policy now, that the agency work covertly with any other agencies of Government?

Admiral TURNER. Well, we work covertly with other agencies of Government.

Senator KENNEDY. Within the other agencies?

Admiral TURNER. We do not work covertly against those people. Somebody in those agencies knows what we are doing.

Senator KENNEDY. Well, does the Director of each of the agencies always know what the activities of the CIA are?

Admiral TURNER. Yes.

Senator SCHWEIKER. You are saying it is done wittingly?

Admiral TURNER. That is correct.

Senator SCHWEIKER. That is the question, whether the other agencies are witting or unwitting of the CIA's activities.

Admiral TURNER. I do not say, Senator Schweiker, that everybody in those agencies knows.

Senator SCHWEIKER. But, you are saying the top official knows?

Admiral TURNER. That is correct. I have had personal conversations with a number of Cabinet officers who have relationships with us, where we work them out in detail. But, I am sure there is a certain secrecy within their agencies, just as there is within ours.

Senator SCHWEIKER. What about CIA use of foundations? Foundations came up with relation to Dr. Geschickter's testimony. I believe the CIA established a policy some years back of not using foundations. Am I correct in that or not?

Admiral TURNER. That, I do not——

Senator SCHWEIKER. A foundation was apparently used to fund the Geschickter fund as a conduit, I believe the policy on the CIA's use of foundations is known as the Katzenbach guidelines. I am just wondering if the Katzenbach guidelines are still in effect.

Admiral TURNER. Yes, they are.

Senator SCHWEIKER. And what, in essence, do they provide?

Admiral TURNER. Well, I am not positive of those with respect to foundations. I would be happy to get that for you.

Senator SCHWEIKER. Could one of your assistants maybe answer that?

Mr. LAUBINGER. I am sorry. I did not hear your question. Would you ask it again?

Senator SCHWEIKER. I believe the Katzenbach guidelines were promulgated back in 1967, when some information about CIA foundation funding came to light. My question really is, are the guidelines still in effect, and what are they?

Admiral TURNER. We will have to furnish that for the record, sir.
Senator SCHWEIKER. Fine. We'd appreciate that.
[The information referred to follows:]

THE DIRECTOR OF CENTRAL INTELLIGENCE

WASHINGTON, D. C. 20505

Office of Legislative Counsel

27 September 1977

Honorable Edward M. Kennedy, Chairman
Subcommittee on Health and Scientific
Research
Committee on Human Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

In response to Senator Richard Schweiker's question as to whether the Agency is following the guidelines of the Katzenbach Report, I have contacted appropriate offices in the Agency and I can assure you that we are complying with the guidelines recommended by the Report and endorsed by the President.

Enclosed is a copy of the Katzenbach Report for your information.

Sincerely,

Lyle L. Miller
Acting Legislative Counsel

Enclosure

THE UNDER SECRETARY OF STATE
WASHINGTON

March 24, 1967

Dear Mr. President:

The committee which you appointed on February 15, 1967 has sought, pursuant to your request:

--To review relationships between government agencies, notably the Central Intelligence Agency, and educational and private voluntary organizations which operate abroad; and

--To recommend means to help assure that such organizations can play their proper and vital role abroad.

The committee has held a number of meetings, interviewed dozens of individuals in and out of government, and reviewed thousands of pages of reports. We have surveyed the relevant activities of a number of federal agencies. And we have reviewed in particular and specific detail the relationship between CIA and each relevant organization.

Our report, supplemented with supporting classified documents, follows.

In summary, the committee offers two basic recommendations:

1. It should be the policy of the United States Government that no federal agency shall provide any covert financial

The President

The White House.

assistance or support, direct or indirect, to any of the nation's educational or private voluntary organizations.

2. The Government should promptly develop and establish a public-private mechanism to provide public funds openly for overseas activities of organizations which are adjudged deserving, in the national interest, of public support.

1: A NEW POLICY

The years immediately after World War II saw a surge of communist activity in organizations throughout the world. Students, scientists, veterans, women and professional groups were organized into international bodies which spoke in the cadences, advocated the policies, and furthered the interests of the communist bloc. Much of this activity was organized, directed, and financed covertly by communist governments.

American organizations reacted from the first. The young men and women who founded the United States National Student Association, for example, did so precisely to give American youth the capacity to hold their own in the international arena. But the importance of students as a force in international events had yet to become widely understood and NSA found it difficult to attract private support for its international activities. Accordingly, the United States Government, acting through the Central Intelligence Agency, provided support for this overseas work.

We have taken NSA as an example. While no useful purpose would be served by detailing any other CIA programs of assistance to private American voluntary organizations, one fundamental point should be clearly stated: such assistance was given pursuant to National Security Council policies beginning in October, 1951 and with the subsequent concurrence of high-level senior interdepartmental review committees in the last four Administrations. In December, 1960, in a classified report submitted after a year of study, a public-private Presidential Committee on Information Activities Abroad specifically endorsed both overt and covert programs, including those assisted by CIA.

Our study, undertaken at a later time, discloses new developments which suggest that we should now re-examine these policies. The American public, for example, has become increasingly aware of the importance of the complex forms of international competition between free societies and communist states. As this awareness has grown, so have potential sources of support for the overseas work of private organizations.

There is no precise index to these sources, but their increase is suggested by the growth in the number of private foundations from 2,220 in 1955 to 18,000 in 1967. Hence it is increasingly possible for organizations like NSA to seek support for overseas activities from open sources.

Just as sources of support have increased, so has the number of American groups engaged in overseas work. According to the Agency for International Development, there has been a nine-fold increase just among voluntary organizations which participate in technical assistance abroad, rising from 24 in 1951 to 220 in 1965. The total of all private American voluntary groups now working overseas may well exceed a thousand.

The number of such organizations which has been assisted covertly is a small fraction of the total. The vast preponderance have had no relationship with the government or have accepted only open government funds--which greatly exceed funds supplied covertly.

The work of private American organizations, in a host of fields, has been of great benefit to scores of countries. That benefit must not be impaired by foreign doubts about the independence of these organizations. The committee believes it is essential for the United States to underscore that independence immediately and decisively.

For these reasons, the committee recommends the following:

STATEMENT OF POLICY

No federal agency shall provide any covert financial assistance or support, direct or indirect, to any of the nation's educational or private voluntary organizations. This policy specifically applies to all foreign activities of such organizations and it reaffirms present policy with respect to their domestic activities.

Where such support has been given, it will be terminated as quickly as possible without destroying valuable private organizations before they can seek new means of support.*

We believe that, particularly in the light of recent publicity, establishment of a clear policy of this kind is the only way for the government to carry out two important responsibilities. One is to avoid any implication that governmental assistance, because it is given covertly, is used to affect the policies of private voluntary groups. The second responsibility is to make it plain in all foreign countries that the activities of private American groups abroad are, in fact, private.

The committee has sought carefully to assess the impact of this Statement of Policy on CIA. We have reviewed each relevant program of assistance carried out by the Agency in case-by-case detail. As a result of this scrutiny, the committee is satisfied that application of the Statement of Policy will not unduly handicap the Agency in the exercise of its national security responsibilities. Indeed, it should be noted that, starting well before the appearance of recent publicity, CIA had initiated and pursued efforts to disengage from certain of these activities.

The committee also recommends that the implementation of this policy be supervised by the senior interdepartmental

*On the basis of our case-by-case review, we expect that the process of termination can be largely--perhaps entirely--completed by December 31, 1967.

review committee which already passes on proposed CIA activities and which would review and assist in the process of disengagement.*

2: NEW METHODS OF SUPPORT

While our first recommendation seeks to insure the independence of private voluntary organizations, it does not deal with an underlying problem--how to support the national need for, and the intrinsic worth of, their efforts abroad.

Anyone who has the slightest familiarity with intellectual or youth groups abroad knows that free institutions continue to be under bitter, continuous attack, some of it carefully organized and well-financed, all of it potentially dangerous to this nation.

It is of the greatest importance to our future and to the future of free institutions everywhere that other nations, especially their young people, know and understand American viewpoints. There is no better way to meet this need than through the activity of private American organizations.

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* If the Statement of Policy is to be effective, it must be rigorously enforced. In the judgment of this committee, no programs currently would justify any exception to this policy. At the same time, where the security of the nation may be at stake, it is impossible for this committee to state categorically now that there will never be a contingency in which overriding national security interests may require an exception--nor would it be credible to enunciate a policy which purported to do so.

We therefore recommend that, in the event of such unusual contingencies, the interdepartmental review committee be permitted to make exceptions to the Statement of Policy, but only where overriding national security interests so require; only on a case-by-case basis; only where open sources of support are shown to be unavailable; and only when such exceptions receive the specific approval of the Secretaries of State and Defense. In no event should any future exception be approved which involves any educational, philanthropic, or cultural organization.

The time has surely come for the government to help support such activity in a mature, open manner.

Some progress toward that aim already has been made. In recent years, a number of federal agencies have developed contracts, grants, and other forms of open assistance to private organizations for overseas activities. This assistance, however, does not deal with a major aspect of the problem. A number of organizations cannot, without hampering their effectiveness as independent bodies, accept funds directly from government agencies.

The committee therefore recommends that the Government should promptly develop and establish a public-private mechanism to provide public funds openly for overseas activities of organizations which are adjudged deserving, in the national interest, of public support.

Such a mechanism could take various forms. One promising proposal, advanced by Mr. Eugene Black, calls for a publicly funded but privately administered body patterned on the British Council.

The British Council established in 1934, operates in 80 countries, administering approximately $30,000,000 annually for reference libraries, exhibitions, scholarships, international conferences, and cultural exchanges. Because 21 of its 30 members are drawn from private life, the Council has maintained a reputation for independence, even though 90 percent of its funds are governmental.

According to the UNESCO Directory of Cultural Relations Services, other nations have developed somewhat similar institutions. The Indian Council for Cultural Relations, for example, is entirely government-financed but operates autonomously. The governing body of the Swedish Institute for Cultural Relations consists of both government and private members. This institute receives 75 percent of its funds from the government and the remainder from private contributions.

The experience of these and other countries helps to demonstrate the desirability of a similar body in the United States, wholly or largely funded by the federal government. Another approach might be the establishment of a governmental foundation, perhaps with links to the existing Federal Inter-Agency Council on International Education and Cultural Affairs.

Such a public-private body would not be new to the United States. Congress established the Smithsonian Institution, for example, more than a century ago as a private corporation, under the guardianship of Congress, but governed by a mixed public-private Board of Regents.

The committee began a preliminary study of what might be the best method of meeting the present need. It is evident, however, that, because of the great range both of existing government and private philanthropic programs, the refinement of alternatives and selection among them is a task of considerable complexity. Accordingly, we do not believe that this exclusively governmental committee is an appropriate forum for the task and we recommend, instead, the appointment of a larger group, including individuals in private life with extensive experience in this field.

The basic principle, in any event, is clear. Such a new institution would involve government funds. It might well involve government officials. But a premium must be placed on the involvement of private citizens and the exercise of private judgments, for to be effective, it would have to have--and be recognized to have--a high degree of independence.

The prompt creation of such an institution, based on this principle, would fill an important--and never more apparent--national need.

Respectfully,

John W. Gardner
Secretary of
Health, Education and Welfare

Richard Helms
Director of
Central Intelligence

Nicholas deB. Katzenbach
Under Secretary of State,
Chairman

Senator CHAFEE. Mr. Chairman, I do not have any questions. It seems to me that this matter, as you know, is going to come up with the general guidelines that will be set forth by the Intelligence Committee, and it seems to me we have cleared the air to some extent.

And I think, as has been said too often here, it is well to bear in mind that all this took place many years ago, before these gentlemen—and, certainly, Admiral Turner—was involved in any way, or the current regime in the Defense Department.

Senator SCHWEIKER. I have another question.

Admiral Turner, last time we were here, I think the chairman and other members of the committee discussed your plans for notification of the institutions and investigators involved in MKULTRA. Could you bring us up to date on whether that notification has taken place? Have all the institutions been told of their former involvement?

Admiral TURNER. Is General Counsel here?

Senator KENNEDY. Would you identify yourself, please?

Mr. JULIEN. Emile Julien; I am with the agency's Office of General Counsel. We are still in the process of working out notifying individuals, where we can find individuals, with the Department of Justice.

Admiral TURNER. All the institutions have been notified, have they not?

Mr. JULIEN. All the institutions, yes.

Admiral TURNER. All the institutions have, and in each case, we have offered, if they want, to provide them all the back-up material that is unclassified that we can. We just sent them a letter and described the fact that we were involved. Some of them have come back and ask for those details. Some of them have sent representatives here to our offices to review the materials. Others have not responded at all. But, we are available to give them everything that we have given you on an unclassified basis that they want.

Senator SCHWEIKER. What about efforts to locate subjects of previous research projects for medical check-ups or follow-ups, or informing unwitting subjects that something might have happened to them during the testing program? What is the policy of the agency, and where are we in that regard?

Admiral TURNER. We are doing everything we can there. But, of course, I am being very careful to keep the agency out of investigating and searching for American citizens inside the United States. We have turned that over to the Attorney General who has turned it over to the FBI. I asked him just yesterday how they were going, and he said they are working on it, but they have not yet actually located anybody. But, we are giving them all of the information we have.

There are only a few cases where we think it is likely they would even be able to find people, and that is like in an institution. A penal institution might have kept some records. They have some problems checking with legalities here, and they have not actually, to my knowledge, found any people yet, but they are checking.

Senator SCHWEIKER. This is all going to be handled by the Justice Department, you say?

Admiral TURNER. Yes, is there a legal check here? I thought it was a matter of informing people and doing medical followup, or am I missing the point?

The Attorney General tells me he had some concerns about the legality of the way we go about finding these people and prying into the records of these institutions, and so on. I do not have the details or specifics on that, Senator, but he has taken responsibility for the governmental effort to locate the individuals, and we are providing support in any way we can.

There is one more supplementary point of information.

Mr. BRODY. I might add one thing, Senator, and that is that we are getting occassional letters in from people who say they have been, or recall being subjects of experiments. We are doing whatever we can to check out those names of people to see if we have anything in our own records to indicate that, indeed, that was the case, and we will be cooperating with those people to try to give them whatever we have.

Admiral TURNER. We have had 77 letters, 49 of which we have answered that we do not have any help for them, and the rest, we are still researching.

Senator KENNEDY. What records would you check for the unwitting subjects? As in all the records, you have checked them all, have you not?

Admiral TURNER. Oh, yes. We have no names of individuals, but they tell us, "My son was in this place at this time; was that anywhere connected with your activities," and so on. Lots of people in the country have written us that are totally unrelated, we are sure.

Senator KENNEDY. In an earlier question in August, we asked about the other tests involving current active tests studying human behavior and what research was taking place. Now, you indicated you would make that available to us. Could you? We have not received that yet. I would be interested in it, if you could provide it for us in the next 2 or 3 weeks; page 32 of the transcript.

Admiral TURNER. All right. We will check it out and get it to you, sir.

Senator KENNEDY. Fine. I know you have got a time problem, and I will just hold you a few more minutes. Can you tell us, from a defense intelligence position, now, what should be being done now, in terms of national security reasons, in this area?

I mean are we faced with adversaries that are continuing to be involved in this? Obviously, we take that responsibility extremely seriously, and we want to work closely with the agency along the guidelines which we have suggested and which you have indicated strong personal support for.

But, is there anything that you want to mention in this area to us today?

Admiral TURNER. I have nothing specific, Senator, but we must keep abreast of what other nations may be doing in these areas that could be used against us or our people. That, of course, need not involve experimentation on humans and, certainly, would not involve unwitting experimentation on humans. But, through our normal intelligence operations, we target against the research activities or the operational use of drugs or mind controlling experimentation in other countries.

I have no evidence at this point that there is any serious threat or activity in that area at this moment, but I think we must constantly monitor that, and if we come to any necessity of a response to it or preparation for it——

Senator KENNEDY. How prevalent is it now, in terms of the Agency's agents overseas, and the rest of them?

Admiral TURNER. Not prevalent. It is not a problem.

Senator KENNEDY. But, your information is that there is that capacity for this activity by adversaries, is that correct?

Admiral TURNER. Yes; there is.

Senator KENNEDY. Let me just make a final comment, Admiral Turner. I think one of the things that is so perplexing, as we are trying to bring the curtain down on this phase of intelligence, is to gain an understanding in terms of the value and in terms of the national security that was obtained through these 21 years of experimentation on unwitting, as well as witting subjects. What was the value in terms of our national security?

I am completely convinced that what was done and what was tested could have been done through the other agencies, and done in the open. I know that there are those that feel, "Well, we wanted to keep away from our adversaries the progress that was being made." But, the fact of the matter is, most of the results of the studies that were being done were actually printed and reported in documents which would have been available to our adversaries.

But, besides that, as we try to come to a conclusion on this we see, really, in what we hope to be our final day, a direct conflict between two agencies of Government working under one administration; the agency and the Department of Defense. It seems there is a conflict in terms of the responsibility for the testing in the latter years, which brings us up to 1973; which was not that long ago.

We are going to make every effort to try and resolve this, given the fact that it is similar material, but we have the two different agencies of Government drawing completely different conclusions. I firmly believe that unless you can get accountability in a program with dimensions such as this, or in any program, for that matter, that we are just not meeting our responsibilities for the protection of Americans.

What we are talking about, I believe, is an extraordinary burden which exists for the Intelligence Agency in the United States. We put more of a burden on our Intelligence Agency than any other country puts on theirs', because we expect you to carry through with the intelligence gathering of information, and yet to do it in ways which are not going to violate the basic and fundamental principles which this country was built upon, and that is a tough challenge. And I think the Agency, at different times in its history, has met it, and at other times, it has not.

But, the fact of the matter is, when we do not have that kind of accountability, we are not going to have the responsibility in an area which has affected individuals in the most extraordinary ways. That is, altering their human behavior, the various kinds of testings, the electronics eavesdropping, and recording, all of which is so alien to the protection of human liberties, and then we see the perversion, in the past, in terms of universities and other agencies of Government. All of this leaves the question of accountability, here in this area, suspect.

We are reaching the real bedrock, in terms of what this society is to be about. I think it really challenges our whole kind of system to see how we can bring an end to those kinds of violations of individual liberties, to protect our institutions, and still provide for our national security.

We continue to be troubled by the nature of the recordkeeping. We have direct conflicts by sworn testimony by different agents. Obviously, your explanation has been of some help, but we had different conflicts about just whether the recordkeeping was in this file or that file; agents, under sworn testimony, who told that they were told by superiors to work up a justification, and others that said that they signed matters as a matter of routine that had no relevancy to the substance which they were interested in.

We cannot come away from the conclusion that at least somewhere—I do not think it is with you, personally, but I think within the Agency, that they felt that this was all part of the past and it was not really necessary to really come forward with the kind of information that close this chapter.

We find, just in our staff people interviewing agents and people that have information, that they have never been contacted by the CIA, even in recent times; recent weeks, recent days. And this is disturbing.

But, we want to look to the future, both toward the charter of the Agency that will be directed toward the protection of the human subjects and we want to look to our legislation. We have extended the life of the panel on protection of human subjects, now. We passed it in the Senate last week. It did not have a particular phrase, in terms of the Agency and DOD on it, but it is absolutely essential that we do, when we come to grips with that, hopefully at the end of this year or the early part of next. The Secretary of HEW has some ideas relating to that whole panel which we have to clarify.

But, we will want your support in the charter which, I am sure, from your own personal testimony, you would see achieved, and we would want your support in terms of the legislation in the future. We thank you for your presence here today.

Admiral TURNER. Thank you very much.

Senator KENNEDY. We will hear from Deanne Siemer from the Department of Defense, who also has got a conflict in terms of time, her testimony will be, as I understand it, relatively brief and then we will recess.

Ms. Deanne Siemer, we are glad to have you here. We welcome you here. You have a lot of empty seats on both sides of you. You look like a lonely figure out there, but I can tell from our past communications with you on other matters, that you handle these responsibilities extremely well and capably for the Department.

We welcome your testimony here, we would like you, if you would, to direct yourself to those inconsistencies that I mentioned earlier with Mr. Turner, giving you an opportunity to address those. I will ask you to do whatever you want to do, in terms of your presentation, but I hope you will come to grips with that particular problem; whatever way you want to proceed.

STATEMENT OF DEANNE C. SIEMER, GENERAL COUNSEL, DEPARTMENT OF DEFENSE

Ms. SIEMER. Senator, let me address first the question of the testing at Edgewood with respect to this compound, which has been designated 3167.

Senator KENNEDY. What was that one? Can you tell us?

Ms. SIEMER. That appears on page 5 of my report to the Secretary, and it is a project that began in 1971, was terminated in 1973, and was part of Often, or Mkoften. Apparently, what happened here is that the Edgewood Arsenal research laboratories were testing a number of compounds prior to the time that the Central Intelligence Agency had any interest in these compounds.

They tested the compounds both on animals and in human testing, and the human testing has been reported to you previously. In 1971, the Central Intelligence Agency apparently reviewed Edgewood's work in connection with their Project Often to identify any part of Edgewood's work that might be useful for that project, or useful for the purposes that they had in mind, which were apparently different than the purposes for which Edgewood had initially done the testing.

In 1971, the Agency transferred some $37,000 to Edgewood to pursue testing of this compound, which was designated EA-3167, which had previously been tested by Edgewood. The Agency was interested in some different kinds of testing.

Specifically, they wanted to know from Edgewood whether this compound could be put on an adhesive substance and transferred to humans through skin contact. Edgewood's previous experiments with this compound had apparently been done in different forms of administering it by intermuscular injection, and other means of testing it, for different purposes.

The Agency wanted to know, could this compound be placed on an adhesive substance and transferred to skin for absorption through the skin. Again, the documentation is very sketchy and it is difficult to tell exactly what was done. Edgewood took the Agency's money, did the testing, and was successful in formulating a way to apply this compound to an adhesive.

They tested it primarily on animals and, indeed, the indications are that all of the results that were reported to the Agency were testing on animals; primarily, I think, on mice. The funding for this was planned to be terminated in January of 1973. The funding apparently was not terminated until June of 1973.

The testing about which you asked Admiral Turner occurred sometime in June of 1973. It is our conclusion from the documents available to us, and from the people available to us, that the testing on that particular compound, in June of 1973, was a part of the Agency's project.

Now, as I say, I have no other documents to support that conclusion than the Agency has to support their conclusion that it was not. The reason I reach that conclusion is that Edgewood had completed its testing of this compound and had no further interest in it at the time that the Agency asked Edgewood to take it up again in 1971. When the Agency asked Edgewood to take it up again, they did, they did a certain amount of testing and that testing was completed in June of 1973, when the funding from the Agency was completed.

There are, I think, five documents relevant to this, which your staff has been provided by the Agency. First, is a CIA document dated May 29, 1973, which is a memorandum for the director of research and development. The second is an undated CIA document entitled, "Influencing Human Behavior." The third is a CIA document dated February 12, 1975, which is a memorandum for the record and a trip report to Edgewood to interview people with respect to what that program involved. The fourth is a CIA document dated February 17,

1971, which, again, is a memorandum for the director of research and development.

Those are the documents that we have; those are the documents that the Agency has; and that is what we know about that program.

Senator KENNEDY. Well, that is very helpful. I gather from what you say that the interest of the Department—DOD had terminated prior to the actual testing that was done.

Ms. SIEMER. That appears to be the case. This compound was one of a large number of compounds that were surveyed by Edgewood for various purposes. The Agency came and looked at Edgewood's survey, identified this compound as of particular interest to their purpose, and asked that further work be done.

Senator SCHWEIKER. There was a destruction of CIA documents in January 1973. Is there any indication that signficant documents relating to this project might have been destroyed with the files that the CIA destroyed around that period of time?

Ms. SIEMER. I do not know that, Senator. I have no way of knowing how the Agency kept their records with respect to this, or what records one would expect to find.

Senator KENNEDY. I think Dr. Gottlieb did that prior to the time he left. We are going to hear about that in a short time.

Were there any occasions that you know of where the CIA decided that they did not want to share the results of some of these experiments with the Department of Defense, and where they took the projects out from under the Defense Department's surveillance?

Ms. SIEMER. Yes, Senator, and that is the experiment that Senator Schweiker referred to with respect to blast concussion. The Navy had some interest in that project because they have an ongoing study of headgear and protective headgear.

The project began in October 1954, and it was a theoretical, physical study intended to use fluid-filled flasks and dynamite to see what happened to the fluid in the flask when the impact from the blast hit them. That work was funded by the Agency, and when the contractor came in with a follow-on proposal, the Agency's documents indicate that they decided to terminate the Navy's involvement in that program because they doubted the Navy's capability to maintain the security of the program.

Senator SCHWEIKER. Do the documents show how long after the Navy's involvement terminated that the CIA carried on with the project?

Ms. SIEMER. They do not, and they do not show that the CIA did carry it on. They do show that the CIA terminated the Navy involvement and, specifically, they were concerned with the possibility of operating a program securely under the previous cover, which was the Office of Naval Research.

Senator KENNEDY. That means, basically, they did not trust them?

Ms. SIEMER. I would hope that they would trust the Navy, but apparently what it involved was—the CIA's document says that this work would involve human experiments of a type not easily justifiable on medical or therapeutic grounds. They also noted that they would have to clear a number of Navy personnel; a number of Navy personnel would have to know that this work was going on. They did not want to do that.

Senator KENNEDY. What year was that?

Ms. SIEMER. That was in 1956.

Senator KENNEDY. I see.

Ms. SIEMER. So, they decided against clearing the Navy personnel, and since they could not run the program without clearing the Navy personnel, using the Navy as a conduit, they terminated the Navy involvement in the program. Now, you have heard testimony this morning that they also terminated the program. We have no way of knowing that that is the case.

Senator KENNEDY. We have been over, in 1975, the Department of Defense's programs in very considerable detail. Could you briefly describe the kinds of research projects that were of interest to the DOD over the recent periods of time, and the significant results of any that the Department of Defense derived from any of these programs?

Ms. SIEMER. Yes, Senator. The program that I described at Edgewood, which terminated in 1973, is really the only significant recent program that was conducted, using military facilities. And as I said, that program was successful in the sense that the Army developed what the Agency asked them to develop, and they were successful in doing what the Agency asked them to do. Whether that constitutes a product or constitutes a contribution, I do not know.

The remaining programs, as you can see—four of them were terminated in the early 1950's or 1960's, and those are four Navy programs, and those programs are primarily where the Navy acted as a conduit for Central Intelligence Agency funds. Let me just review those briefly for you.

There were four programs in which our records indicate that the Navy operated solely as a channel for funds to outside contractors. Those are the programs described in my memorandum, the first of which is a synthesis of analogs of certain kinds of stimulants. The second is the identification of a nonaddictive substitute for codeine. The third is the blast concussion project which I have just discussed, and the fourth is the administration of LSD to human subjects, again, back in the early 1950's.

Those four projects, the documents indicate, the Navy operated solely as a conduit of funds. Two of the remaining programs were Army programs, and there was no human testing. Those programs—the first is described on page 4 of my memorandum, and that was the effort to identify drugs with behavioral effects. This is the Chickwit, or Mkchickwit, program, which was looking to identify developments in Europe or the Far East.

The second was a project to develop a data base for computer use to easily access the large amount of information about various drugs, and Edgewood contributed to the data base that was used by the Agency for its Project Often.

Senator KENNEDY. I guess they had a division between the Agency and the DOD, a matter which we referred to earlier. Also, during the late 1950's, there was a decision by DOD to split off its testing, in terms of LSD, from the CIA, and those are referred to in the Church committee report.

So, I think the significance is that we have seen in the past a division of responsibility and the separations of responsibility, and the absence of coordination. And at least in terms of the most recent times, we have seen a continued division, in terms of responsibility; as late as

this morning, at least in terms of interpretation about who had the responsibility in these particular areas of Mkchickwit, Search, and Ultra.

What benefits were derived from these programs?

Ms. SIEMER. The blast concussion program that was conducted by the Navy for a year resulted in a 17-page research report, which I am informed was a valuable contribution. That researcher has continued to work in that field, and that is a field that is of substantial use to the military, because it involves the development of protective headgear.

The project to develop data bases for computer access also has a substantial amount of use. As you know, there is a vast amount of data about drugs, and their side effects and direct effects, available, and being able to access that information and retrieve it quickly and efficiently is a useful contribution.

The only other program that was conducted by the services is the program at Edgewood with respect to applying this compound to adhesive substances, and whether that was useful or not would have to come from the Agency. We were successful in doing what they asked us to do, which is developing a way of applying it to the adhesive substance, but whether the use of an adhesive substance is useful, we do not know.

Senator CHAFEE. It seems to me that in some of these experiments, the fact that they are not useful, itself, is helpful. A negative answer can sometimes be of assistance.

The thing that has bothered me a little is, for example, the testing of this EA-3167 that was being done at Edgewood Arsenal, under the Army's direction and without the CIA involvement, at the beginning, anyway, and it seems to me that recordkeeping in this whole business seems to have been haphazard, at best.

Suppose somebody comes along 5 years from now and thinks that there might be something to EA-3167? Are they going to start all over again, or does somebody have a record that shows this was a failure?

Ms. SIEMER. The records available show what the compound is, chemically; show what the results were on dogs, guinea pigs, monkeys, and so on, and so all of the results of that research are available. As to the application—what the Central Intelligence Agency made of whatever was done for this particular application at Edgewood, I do not know what records are available of that.

But, the actual results of dog and monkey and mouse experiments—that is, that the mouse died, or the monkey had particular effects—I believe are available.

Senator CHAFEE. Well, it seems to me fairly important to have this information—you mentioned a retrieval system. It is fairly important, like we just said, that you do not go through this all over again when some bright fellow comes up with the suggestion.

Also, with reference to those two military volunteers that were discussed—now, was that under CIA, or was that under—I was going to say "you," but I will say the Army I am not sure.

Ms. SIEMER. Well, that is the subject of the current discussion, as to whose problem it was. It is my conclusion from the documents that that was a part of the CIA program. I cannot say it any more definitively than Admiral Turner can say it is his conclusion it was a part of a DOD program.

Senator CHAFEE. Thank you very much.

Senator SCHWEIKER. Based on your survey of the different projects that were done through the Department of Defense, I wonder if you could give us a rough estimate of how many human subjects were used by the Department of Defense in these kinds of experiments over this period.

Now, I am not talking about situations in which the Department of Defense was merely a conduit for the CIA. Obviously, as you point out in your statement to us, DOD served as a conduit in a number of instances. On the other hand, there were some experiments that the Defense Department was responsible for, not as a conduit. Could you give the committee any kind of a rough estimate of the number of human beings that were involved in these kinds of experiments during this period, in experiments that the Department of Defense or one of its branches or subintelligence groups was running?

Ms. SIEMER. Yes; I think, Senator, I could give you some sketchy understanding that I have from the documents. Of these eight programs in which there was some military participation, there are four in which there was human testing, and one in which there was a possibility of human testing.

The first is the Edgewood Arsenal program that we have been talking about, and that is this compound EA-3167. Prior to the Agency's involvement in 1971, there was testing of that compound in a different form and for different purposes at the Holmesburg State Prison in Pennsylvania. The documents indicate that that may have involved from 5 to 12 prisoners; one document says 5, another one says 12.

There was subsequent testing of that compound at the Edgewood laboratories involving military volunteers, and that phase of it may have involved as many as 15 persons.

Senator SCHWEIKER. They were witting?

Ms. SIEMER. Yes; they were, Senator, and that was prior to the Agency's involvement.

The Navy project with respect to synthesis of analogs of certain stimulants—the documents do not indicate that that involved human testing, but it is possible that it did. I am unable to determine whether it did or did not. The relative CIA document indicates that the merits were going to be determined on tests on mice.

The second program conducted by the Navy, which was the identification of a nonaddictive substitute for codeine, was carried out at a Government agency in Kentucky. We do not have any indication of how many persons that was conducted on, but that was a very substantial project. The Central Intelligence Agency spent over $280,000 on that project, and that was an average of between $34,000 and $45,000 a year. So, there may have been a substantial number of people involved in that.

Senator SCHWEIKER. Again, were they witting or unwitting subjects?

Ms. SIEMER. I have no way of telling that. Those records would be available only from the Agency. This is a program in which we—that, the Navy—was only a conduit for the funds.

Senator SCHWEIKER. Is that Dr. Isbell's work that you are talking about?

Ms. SIEMER. Yes; it is.

The third is the administration of LSD to human subjects. That was begun in 1952 and completed in 1956. Our records indicate that there were six knowing subjects who were a part of the researchers' own staff who were involved in that, and that later on, there were eight subjects who were Soviet defectors who were tested in Europe—I am sorry. That is part of project 5.

On project 4, this was done by CIA, and those are the only facts that we have in our documents.

On the 5th, the Navy project which was development of speech-inducing drugs, there was a test of those drugs on eight Soviet defectors in Europe in 1952, I think—in August or September of 1952—and the test was apparently a failure, because they could not formulate the substance in a way that the defectors could not taste it and, therefore, they could not be kept unwitting of the test.

Senator KENNEDY. Sometimes I think that might have leaked out from over in the Senate, that speech-inducing drug.

Ms. SIEMER. That is it. That is what we know from the documents we have available.

Senator SCHWEIKER. Now, is this work that you have described pretty well confined to programs conducted in connection with the CIA? In other words, my question also directed itself—and I am not sure if I have made it clear—to non-CIA sponsored work. Are you including that in your answer?

Ms. SIEMER. No, I am not, Senator. The non-CIA sponsored work was previously reported to you in 1975, and you have our Inspector General's report on that and that is, so far as we know, a complete report.

Senator SCHWEIKER. OK. Now, in connection with that, a couple of years ago, we were told by the Defense Department that they would make every effort to contact people who had been used as subjects of DOD research. I think there were several thousands of people involved, as I recall, at least well over a 1,000, though I cannot be precise, without checking. The Department was going to make every effort to contact the people who were tested in the program. I realize that you are new on board and were not involved with this initially, so my question may be something you have to report back to us on a little bit later.

Could you update this committee on whether DOD has been successful in contacting former subjects of research? How effective have the Department's efforts to follow up and inform the subjects of those tests been? The witnesses at our previous hearings did, I believe, make that commitment to us.

Ms. SIEMER. I do have a report on that for you, Senator. This report is as of August 22, 1977, which is the date of your original hearings on this subject. As of that date, we had completed medical examinations on 127 of the known participants; 176 had been contacted and had agreed to an examination, but the examination had not yet been scheduled; 146 had been located, but they had not made a decision as yet as to whether to be examined; 22 were deceased, and we were able to find death certificates for 12 of those, but have other information that 22 of them were deceased; 39 refused examination, and 177 we are still working on locating.

Senator SCHWEIKER. I want to compliment you on your testimony. You certainly have been very direct, specific, and candid with us. It is obvious that you have done your homework and certainly tried to comply with the intent of the committee's request for testimony in areas of our responsibility, and we thank you for that.

Senator CHAFEE. Mr. Chairman, just one other question. About those two military volunteers that were involved in 1973, was there any followup on them, regardless of who was responsible for the experimentation, either DOD or CIA?

Ms. SIEMER. It is my understanding, Senator, that they are included in the followup statistics that I have just given you.

Senator CHAFEE. Now, I just wonder, out of curiosity, would the results of that examination go back into the file at Edgewood, so that the experimentation is then wrapped up and the documentation on the experimentation completed?

Ms. SIEMER. The followup study is being done as a separate study, but the information developed from it can be accessed through computers and other records by researchers. We have privacy problems, and that is, you have to be able to generalize the data, and cannot transmit data about a specific person.

Senator CHAFEE. Thank you. Mr. Chairman, I would like to add my congratulations on the testimony today. You certainly had all the facts.

Senator KENNEDY. Well, all of us are impressed. You obviously have personally taken this—and the Department has—as a matter of very considerable priority and importance, and it is shown by your familiarity with the material and the responsiveness to the questions.

Ms. SIEMER. Thank you, Senator.

[The following material was submitted for the record:]

September 20, 1977

Honorable Edward M. Kennedy
United States Senate
Chairman, Senate Subcommittee on
Health, & Scientific Research
Washington, D.C. 20510

Dear Mr. Chairman:

Your letter to the Secretary of Defense of August 10, 1977 requested all classified and unclassified documents relating in any way to human experimentation in connection with Central Intelligence Agency projects designated by the code words MKSEARCH, MKOFTEN and MKCHICKWIT.

Pursuant to that request, the Office of General Counsel coordinated a search of the files maintained by the Army, Navy and Air Force from 1950 to the present. That search was completed on September 15, 1977 and a memorandum was prepared for the Secretary summarizing the results.

I have enclosed a copy of that memorandum and copies of each of the documents retrieved from Department of Defense files. It appears from the available documents that projects MKSEARCH, MKOFTEN and MKCHICKWIT were directed, controlled and funded by the Central Intelligence Agency. Much of the participation of the military departments was solely as a conduit of funds from the Central Intelligence Agency to outside contractors. A substantial amount of this participation was terminated in the 1950's and 1960's. The remaining activity was terminated no later than 1973.

All of the military department documents identified in Appendices A and B have been declassified. The memorandum refers to and appends certain Central Intelligence Agency documents that have not been declassified. If the Agency declassifies those documents, the memorandum should also be declassified.

If the Subcommittee requires further information or assistance in this matter, please let me know.

Sincerely,

Enclosures

Deanne C. Siemer

GENERAL COUNSEL OF THE DEPARTMENT OF DEFENSE
WASHINGTON, D. C. 20301

September 20, 1977

MEMORANDUM FOR THE SECRETARY OF DEFENSE

SUBJECT: Experimentation Programs Conducted by the Department of Defense That Had CIA Sponsorship or Participation and That Involved the Administration to Human Subjects of Drugs Intended for Mind-control or Behavior-modification Purposes

On August 8, 1977 you requested that the Office of General Counsel coordinate a search of Department of Defense records to determine the extent of Department of Defense participation in three projects identified by the Director of Central Intelligence on August 3, 1977 as including the administration of drugs to human subjects for mind-control or behavior-modification purposes. In addition, you requested that the search attempt to identify any other project conducted or participated in by the Department of Defense in which there was any Central Intelligence Agency involvement and which included the administration of drugs to human subjects for mind-control or behavior-modification purposes. That search was conducted during the period August 15, 1977 through September 15, 1977 and covered the records of the Military Departments from 1950 to the present.

The results of the search indicate that there were three such programs in which the Army participated over the period 1969 to 1973; five such programs in which the Navy participated over the period 1947 to 1973; and no such programs in which the Air Force participated. In four of these eight programs the Department of Defense participation was limited to channeling funds to outside contractors in order that the sponsorship of the Central Intelligence Agency be covered. In two of the remaining four programs there was no testing on human subjects. Four of the programs were terminated in the 1950's or early 1960's and the remainder were terminated in 1973.

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It appears from the documents that the three codeword projects of the Central Intelligence Agency identified by the Director in his testimony as basically Department of Defense projects were, in fact, planned, directed and controlled by the Central Intelligence Agency. Each of these projects and the participation of the military services is described below.

I. Codeword Projects Identified by the Central Intelligence Agency

In testimony on August 3, 1977, before a joint session of the Senate Select Committee on Intelligence and the Senate Subcommittee on Health and Scientific Research, the Director of Central Intelligence reported that the Central Intelligence Agency had located a number of boxes of documents, consisting largely of financial records, relating to experiments using human subjects in which drugs were tested for mind-control and behavior-modification purposes. The Director testified that it appeared that three of the projects described by these documents -- projects designated MKSEARCH, MKOFTEN and MKCHICKWIT -- were Department of Defense programs with which the Central Intelligence Agency had had some contact. The Director also described three other projects -- designated MKULTRA, MKDELTA and MKNAOMI -- which were primarily Central Intelligence Agency projects but which might have had some Department of Defense involvement.

It appears from the available documents that these projects cover subject matters as follows:

MKDELTA: This was apparently the first project established by CIA in October, 1952, for the use of biochemicals in clandestine operations. It may never have been implemented operationally.

MKULTRA: This was a successor project to MKDELTA established in April, 1953, and terminating some time in the late 1960's, probably after 1966. This program considered various means of controlling human behavior. Drugs were only one aspect of this activity.

MKNAOMI: This project began in the 1950's and was terminated, at least with respect to biological projects, in 1969. This may have been a successor

project to MKDELTA. Its purpose was to stockpile severely incapacitating and lethal materials, and to develop gadgetry for the dissemination of these materials.

MKSEARCH: This was apparently a successor project to MKULTRA, which began in 1965 and was terminated in 1973. The objective of the project was to develop a capability to manipulate human behavior in a predictable manner through the use of drugs.

MKCHICKWIT or CHICKWIT: This was apparently a part of the MKSEARCH program. Its objective was to identify new drug developments in Europe and Asia and to obtain information and samples.

MKOFTEN or OFTEN: This was also apparently a part of the MKSEARCH project. Its objective was to test the behavioral and toxicological effects of certain drugs on animals and humans.

Beginning on August 4, 1977, Army and Navy investigators undertook a search of the boxes of Central Intelligence Agency records identified by the CIA code words OFTEN and CHICKWIT in order to locate documents relevant to possible Department of Defense involvement in these projects. On September 7, 1977, the Agency permitted DoD representatives to search additional boxes containing MKULTRA records. Both sets of materials consisted of approvals of advances of funds, vouchers and accounting records relating to these projects.

II. Army Programs

It appears from the available documents that the Army was involved in one aspect of the Central Intelligence Agency project designated as MKCHICKWIT and two aspects of a counterpart project designated as MKOFTEN. The document search is described in section A below, and each of the Army programs is described in section B below.

A. Records searched

The search of Army records was coordinated by the Director of the Staff. The search included the files of the Edgewood

Arsenal Research Laboratories, the Dugway Proving Grounds, the Department of Defense Investigative Service (with respect to the Special Operations Division at Fort Detrick), the Department of the Army Inspector General, the Army activity in the U.S. Biological Warfare Program, and the Army Intelligence Agency.

B. Programs identified

(1) Identification of new drugs with behavioral effects

This project began in 1967 and was terminated in 1973. It was carried out primarily by a contractor in California. The project was apparently funded jointly by the Army, through Edgewood Arsenal Research Laboratories, and the Central Intelligence Agency. The funds contributed by the Agency were used by Edgewood for payments to a private contractor. This project was a part of the project designated as MKCHICKWIT.

This project was involved solely with the collection of information. No testing on human subjects was conducted. The Central Intelligence Agency apparently provided $12,084 in 1967 and $5,000 in 1969 for this project. The extent of the Army's financial contribution to this project is unknown.

(2) Data bases on evaluation of pharmacological products

This project apparently began in 1968 and was completed by 1971. It was carried out by the Edgewood Arsenal Research Laboratories. The Central Intelligence Agency transferred funds to the Army for this purpose in 1968, 1970 and 1971. This project was a part of the project designated as MKOFTEN.

Edgewood created data bases for computer use with respect to information on pharmacological products. These included human clinical data obtained from volunteer subjects in other Edgewood projects, not connected with the Central Intelligence Agency. These data bases were acquired by the Agency in an effort to enhance its computer capability to detect and nullify manipulation of U.S. personnel by means of these materials. The two data bases provided by Edgewood, arising

out of its work, were supplemented by three other data bases created by other contractors or the Agency. */

This project involved only the transfer of information to computer usable form. No testing on human subjects was conducted. The amount of funding is not known.

(3) Determination of clinical effects of a glycolate class chemical

This project began in 1971 and was terminated in 1973. It was carried out by the Edgewood Arsenal Research Laboratories and was funded by the Central Intelligence Agency. This project was a part of the project designated as MKOFTEN.

It appears from the available documents that Edgewood had been testing a number of incapacitating agents in its own programs without Central Intelligence Agency participation. Edgewood identified a compound designated as EA#3167 as particularly effective and tested it on animals. Edgewood also engaged in clinical testing on human volunteers at the Holmesburg State Prison in Philadelphia, Pennsylvania, using prisoners as test subjects and at the Edgewood laboratories using military personnel as test subjects. It appears that all of the test subjects were volunteers and that stringent medical safeguards and followup procedures were used.

In 1971, the Central Intelligence Agency reviewed prior Edgewood work and identified EA#3167 as relevant to the MKOFTEN program. The Agency set up a joint effort with Edgewood to pursue further testing of this compound. In 1971, the Agency transferred to Edgewood $37,000 for this purpose. Most of the testing under CIA sponsorship was with animals. The primary effort was to determine whether EA#3167 could be used effectively if applied to the skin through some type of adhesive tape. There was only one experiment that involved human subjects. In June, 1973, two military volunteers were apparently tested using EA#3167. The documents do not give any details with respect to these tests.

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*/ The Navy contributed a similar data base to the MKOFTEN project but it appears from the available documents that the work to create the data base was undertaken as an independent Navy project not designed for any CIA use, and that there was no transfer of CIA funds to the Navy for this purpose.

C. Documents released

The Army has identified nine documents related to the programs described in Section B. A list identifying those documents is set out in Appendix A.

III. Navy Programs

It appears from the available documents that the Navy was not involved in any aspect of the Central Intelligence Agency projects designated MKSEARCH and MKCHICKWIT. It appears that the Navy did act as a financial intermediary through which the Central Intelligence Agency dealt with an outside contractor that conducted one research effort that was a part of the MKOFTEN project. It also appears that the Navy conducted, directly or through contractors, five programs in which there was Central Intelligence Agency sponsorship or participation and which included the administration of drugs to human subjects for mind-control or behavior-modification purposes. The records that were searched are described in section A below. Each of the projects discovered is described in section B below.

A. Records Searched

The Special Assistant to the Secretary of the Navy coordinated the search of Navy records. The search covered archival material with respect to the activities of the Office of Naval Intelligence, Bureau of Medicine and Surgery, and the Office of Naval Research.

B. Programs identified

(1) Synthesis of analogs of certain central nervous system stimulants

This project began in 1971 and was terminated in January, 1973. It was performed by a contractor located in Massachusetts. The involvement of the Navy was only as a conduit for funds between the contractor and the Central Intelligence Agency. Some of the funding documents identify this project as a part of project OFTEN.

In December, 1970, the contractor contacted the Central Intelligence Agency project officer directly and suggested research work on two types of drugs: analogs of DOPA and dopamine and analogs of picrotoxin. After the work was undertaken, the contractor added a third aspect, the study of

analogs of the hallucinogen ibogaine. In March, 1972, the contractor suggested enlarging the scope of the work to include narcotic antagonists or blocking agents. One document indicates that "The overall objective of these studies is to synthesize new classes of pharmocologically active drugs affecting the central nervous system so as to evaluate their modification of man's behavior." (Doc. No. CIA-1.) The purpose of creating analogs, rather than using the parent compounds, was to find drugs "which will be more specific in action as well as more reliable." (Doc. No. CIA-2.)

The Central Intelligence Agency may have transmitted as much as $117,938 for this project to the Office of Naval Research during the period February 26, 1971 through June 23, 1972. The Central Intelligence Agency authorization document stated: "This project is funded through the Office of Naval Research. This arrangement protects the Agency's association with this area of research and provides the contractor with credible sponsorship. The work will be unclassified, but Agency association will be confidential." (Doc. No. CIA-1, 3.)

There is no indication in the documents available to the Navy that human testing was performed by the researchers. One of the documents reports: "The relative merits of the synthetic compounds will be determined in mice, and information as to the underlying biochemical basis for the observed pharmacological activities will be deduced from the comparative effects of the various compounds." (Doc. No. CIA-8.)

One of the researcher's progress reports indicates an intention to publish the results of the first phase of this work, on analogs of DOPA and dopamine, at a professional meeting in the fall of 1972 but there is no indication that publication was accomplished. (Doc. No. N-2.)

(2) Identification of nonaddictive substitute for codeine

This project began in 1954 and was continued at least until 1964. It was performed at the facilities of another government agency located in Kentucky. The involvement of the Navy was only as a conduit for funds between the Central Intelligence Agency and a researcher who was associated with a federal government agency. One of the funding documents identifies this as part of project MKPILOT.

According to the information available to the Navy, the purpose of the project was to find a nonaddictive substitute for codeine. The work was done at the Addictive Research Center, U.S. Public Health Service Hospital, in Lexington, Kentucky. It is unclear from the information available to the Navy whether the researcher was an independent scientist using government facilities or a government employee.

It appears that the researcher tested some 800 compounds on addicted patients. There is no indication in the documents as to the number of persons involved or the compounds tested. Three compounds were retained and all are now common drugs: darvon which is used as a pain killer; dextromethorphan which is used in cough syrup; and lomotil which is used as an antidiarrhea drug.

The Central Intelligence Agency transferred at least $282,215 to the Office of Naval Research for this program with instructions to make the funds available to the researcher at the U.S. Public Health Service Hospital. The project costs appear to have been between $34,000 and $45,000 per year. These documents specify that "the interest of CIA in this project is classified Secret and is not to be revealed ... ." (e.g., Doc. No. N-18.)

(3) Identification of effects of blast concussion

This project began in October, 1954 and was terminated, at least with respect to the Navy, in December, 1955. It was performed by a contractor located in California. The involvement of the Navy was primarily as a conduit of funds from the Central Intelligence Agency to the contractor. A small amount of Navy funds may also have been used for this contract. In December, 1955 this project was terminated as far as the Navy involvement was concerned and it thereafter apparently became subproject 54 of the MKULTRA project.

While the Navy was involved with this project it did not include any drug testing and apparently did not include any testing on humans. The contractor was investigating a new theory of the dynamics of brain concussion. Fluid-filled flasks were used to measure the effect of blast impacts from a 2 1/2 lb. charge of dynamite 10 feet away. The results of this work were published in 1957 in a 17-page report entitled "On the Impact Thresholds of Brain Concussion." (Doc. N-19.)

The Central Intelligence Agency transferred $20,000 to the Office of Naval Research for use on this project. The Office of Naval Research may have contributed as much as $5,000 of its own funds to this project.

In December, 1955, the contractor submitted a proposal for a continuation of the research for 1956. In that proposal the contractor pointed out that brain concussion "is always followed by amnesia for the actual moment of the accident" and suggested that "if a technique were devised to induce brain concussion without giving either advance warning or causing external physical trauma, the person upon recovery would be unable to recall what had happened to him. Under these conditions the same technique of producing the concussion could be re-used many times without disclosure of its nature." (Doc. No. CIA-4.) In discussing the techniques envisioned, the contractor described non-drug means for inducing concussion, but went on to describe a technique for providing immunity to concussion that "involves the introduction of a small quantity of gas, approximately 1 cc, into the spinal cord." (Doc. No. CIA-4.)

When this project proposal was received, CIA decided to convert it to the MKULTRA project rather than using the Navy as a conduit for funds. A memorandum dated January 10, 1956 explained:

> The first year's work on this program was financed through the Navy for several reasons ... .
>
> When [the contractor] was cleared and informed of our true interests in this research, the whole scope of the project changed, and it became apparent that developments might be expected in the second year which would make it impossible to operate the program securely under the previous cover. Specifically, human experiments of a type not easily justifiable on medical-therapeutic grounds would be involved. ...
>
> For the reasons given above and because this project in a general way will begin to become involved in the subjects of interrogation and some aspects of brain-washing,

TSS/CD has decided that it should be funded through project MKULTRA rather than by less secure methods.

(Doc. No. CIA-5.) The project thereafter became subproject 54 of the MKULTRA project and there is no indication of further involvement by the Navy.

(4) Administration of LSD to human subjects

This project began in 1952 and was apparently completed by 1956. It was performed by a researcher located in New York. Navy is listed as a sponsor in only one CIA document prepared at a later date, and not otherwise corroborated. If Navy was involved, it was solely as a conduit for funds between the Central Intelligence Agency and the researcher. This project has been identified as subprojects 7, 27 and 40 of the MKULTRA project.

(5) Development and administration of speech-inducing drugs

This project apparently began in 1947 and ended in 1953. It was performed primarily by a contractor located in New York and, in one aspect, by the Navy at a location in Europe. The involvement of the Central Intelligence Agency was apparently only as an interested observer. The project was funded by the Navy through the Naval Medical Research Institute. The Central Intelligence Agency records of this project are apparently in the BLUEBIRD and ARTICHOKE project files.

The Navy arranged in 1950 to obtain marijuana and heroin from the FBI for use in experiments and entered a contract with a researcher in New York to develop drugs and instrumentation for use in interrogation of prisoners of war, defectors and similar persons. The security cover for the project was a study of motion sickness. The study began with six of the researcher's staff as knowing volunteers. The project was expanded to cover barbituates and benzedrine. Other substances were evaluated.

In August, 1952 the Office of Naval Intelligence informed the Central Intelligence Agency that it had developed drugs that might have the desired characteristics and was about to test them on human subjects who would be unaware of the test. The drugs were administered to about eight subjects, each of whom was a Soviet defector, and each test was done in Europe

in September, 1952. The tests were apparently not satisfactory because the drugs used had such a bitter taste that it was not possible to keep the human subjects from knowing about the test.

By September, 1952 it was apparent that this project was not producing useful results and the Navy began to consider ending it. By 1953 most work had apparently been phased out.

C. Documents released

The Navy has identified 42 documents which are related to the programs described in section B. A list identifying those documents is set out in Appendix B.

IV. Air Force Programs

It appears from the available documents that the Air Force was not involved in any aspect of the Central Intelligence Agency projects designated MKSEARCH, MKOFTEN and MKCHICKWIT. It also appears that the Air Force was not involved in any program in which there was Central Intelligence Agency sponsorship or participation and which included the administration of drugs to human subjects for mind-control or behavior-modification purposes.

A. Records searched

The search was conducted by the Office of the Assistant Secretary of the Air Force for Research, Development and Logistics. The Air Staff offices in which records were searched are: The Surgeon General, the Deputy Chief of Staff for Research and Development, the Air Force Office of Special Investigations, and the Air Force Intelligence Service.

B. Programs identified

There were no records or information found relating to projects designated MKSEARCH, MKOFTEN or MKCHICKWIT or corresponding to the description of the subject matter of those projects available through Central Intelligence Agency files.

There were no documents or information found indicating any CIA involvement in any experimentation program conducted by the Air Force that included administration of drugs to human subjects.

C. Documents released

None.

VI. Current Programs

There are no programs currently maintained by any Department of Defense component or contractor involving drug testing on human subjects in which the Central Intelligence Agency is in any way involved.

All current Department of Defense programs involving the use of investigational drugs on humans, including its contractor programs, have been approved by the Food and Drug Administration.

Editor's Note: Due to the voluminous content of the appendixes mentioned in this memorandum, and in the interest of economy, the material was retained in the files of the subcommittee.

Senator KENNEDY. We appreciate your testimony. We will try and work, without taking a lot more of your time—I am sure you have very many important things—just to try and resolve the basic kinds of conflicts, so that in our report, we are able, to the extent that we can, to put some of these matters to rest.

You have been very, very responsive and very helpful to the committee, and we appreciate your presence here.

Senator CHAFEE. Maintaining the high standards of the Department of Defense.

Senator KENNEDY. We will recess and gather in the anteroom in order to hear from Dr. Gottlieb.

[Whereupon, a brief recess was taken.]

[The hearing was reconvened in the anteroom.]

Senator KENNEDY. We will come to order.

I would ask if you would be kind enough to rise.

Do you swear the testimony you will give is the truth, the whole truth, so help you, God?

Dr. GOTTLIEB. I do.

Mr. LENZNER. I wanted to say, on behalf of Dr. Gottlieb, how much we appreciate the courtesies that the committee has extended in responding to his health and cardiac problems. I also want to express our appreciation to the committee staff, to Dr. Horowitz, Walter Sheridan, and Jim Mitchie for the assistance they have provided in reviewing the materials that the committee asked us to review prior to Dr. Gottlieb's testimony.

The doctor has got a brief statement he would like to read with the committee's permission because I think it helps place in perspective some of the issues we believe the committee is interested in pursuing.

Senator KENNEDY. The record will show that Dr. Gottlieb has been sworn, and the attorney, Mr. Lenzner, has indicated that Dr. Gottlieb would like to read his statement. Then we will get into the question period.

Dr. Gottlieb.

STATEMENT OF SIDNEY GOTTLIEB, M.D., FORMER CIA AGENT, ACCOMPANIED BY TERRY F. LENZER, ESQ., WALD, HARKRADER & ROSS, WASHINGTON, D.C.

Dr. GOTTLIEB. My name is Sidney Gottlieb and I reside in California. I am appearing at this hearing as I have appeared in others in the past, voluntarily and prepared to offer whatever constructive testimony made possible by my background and remembrance of things past.

I would like to first comment on project MKULTRA.

To the best of my recollection, several research inquiries—which much later came to be organized under the cryptonym MKULTRA—were begun in about 1952. Their purpose was to investigate whether and how it was possible to modify an individual's behavior by convert means. The context in which this investigation was started was that of the height of the cold war with the Korean war just winding down; with the CIA organizing its resources to liberate Eastern Europe by paramilitary means; and with the threat of Soviet aggression very real and tangible, as exemplified by the recent Berlin airlift.

In the judgment of the CIA, there was tangible evidence that both the Soviets and the Red Chinese might be using techniques of altering human behavior which were not understood by the United States and which would have implications of national survival in the context of national security concerns at that time. It was felt to be mandatory and of the utmost urgency for our intelligence organization to establish what was possible in this field on a high priority basis.

To mention just a few examples, there was a concern about the apparent manipulated conversions of Americans interned in Red China for a very short time; there was also a concern about apparently irrational remarks made by a senior American diplomat returning from the Soviet Union; perhaps most immediate and urgent in our minds was the apparent buying up of the world supply of, at that time, little-known new psychogenic material LSD; lastly, there was a growing library of documented instances of routine use by the Soviet Security Services of covertly administered drugs. This list, by the way, has grown and been added to up to the time I left the CIA.

I accept full responsibility for my own role in these activities, in relation to what my position in the CIA implied, as to my level of responsibility as it changed over the years. At the outset, in the period 1951–57, I was head of a branch of a division charged with the responsibility of looking into the matters which I described above. I set up and handled some projects myself, and supervised and administered other CIA employees monitoring other projects. As the years went on and I assumed broader responsibilities, my personal involvement in the projects lessened. Thus, my involvement was most direct in the period 1951–57.

From 1957 to the end of 1960, I was not directly involved at all, being assigned to other matters. I was stationed overseas 1957–59, and was assigned to another unit in headquarters in the period 1959 to the end of 1960. Late in 1960, I returned to TSD to become Chief of the Research and Development component; in 1962, I became Deputy Chief of TSD; and from 1966 to 1973, I was Chief of TSD. I retired from the CIA on June 30, 1973. I want to stress, however, that a policy review of project MKULTRA and all of the projects I was connected with took place at least once a year during MKULTRA active period, which I remember as 1952–65. In addition, as each project was funded, approval in writing at least two levels above mine were required in all research and development activities.

Project names, like Artichoke and Bluebird, have been mentioned in the press, associated with my name. My remembrance is that Project Artichoke was managed by the Office of Security and that I had no direct or indirect responsibility for it, although I became aware of its existence and general nature over the years. Project Bluebird, as I remember it, was also an Office of Security concept, possibly never actually realized, which later evolved into a TSD-sponsored activity looking into brainwashing, and ultimately included the Society for Investigation of Human Ecology.

One unusual project started in 1952 and continued until about 1965 was an arrangement originally set up by me with the Bureau of Narcotics. In this regard, I have previously furnished my recollections of this matter during my 40-odd hours of testimony to the Senate Select Committee on Intelligence—I did not mean to say that the testimony was odd—but I am glad to discuss these matters again with this committee.

The origin of this Bureau of Narcotics activity rested in my becoming aware, through reading OSS research files of an investigation into the behavior-alternating possibilities of Tetrohydrocannabinol, a synthetic material related to the naturally active constituent of marihuana, I was able to contact an officer of the Bureau of Narcotics who had participated firsthand in the OSS investigations. With him, I made an arrangement, funded by the CIA, whereby he would covertly administer chemical materials to unwitting people. The Bureau of Narcotics, through this individual, had their own interest in determining whether chemical materials could be used to elicit or validate information obtained from drug informants. The arrangement would benefit the CIA's program in that information would be obtained, unobtainable in any other way, on the effects of these materials used in situations closely resembling those in actual operations.

I have no personal awareness of specific individuals to whom these materials were administered. To the best of my knowledge and remembrance, the materials administered in the great majority of cases under the Bureau of Narcotics project were LSD and Meretran. I do not have detailed information on the exact number of individuals involved, but the impression I have is that the number involved was between 20 and 50 individuals over the years of the project.

If I might interject here, that impression remains after studying carefully the files that your staff made available to me.

I would like to add that the Bureau of Narcotics project was the only one of its kind in the sense of trying to gain urgently needed information in the administration of materials in an operational context. Although it has drawn considerable attention in the news media, because of its unusual nature, it was actually a very small part of an overall program which took place in more conventional project, in the more normal setting of universities and laboratories, as borne out by the records shown to me by the committee staff.

This committee might be interested to know that the total amount of money spent on everything related to MKULTRA was limited to 10 percent of the total research done by TSD. To my remembrance, at the height of the spending on MKULTRA-related activities, it never even reached this percentage.

The great bulk of the research done under the general umbrella of the Project MKULTRA took place in academic and other research settings. These projects almost always represented work that the individual investigators would have been doing in any case. The agency's role was to provide the funds and, in many cases, provide access to the investigator if specific interpretation of his results in terms of our interests were needed. To my recollection, in every case, the results of the related research were published. I should add "where appropriate." I cannot testify that everybody published everything they did.

The degree of wittingness of the principal investigators on these projects varied depending on whether we judged his knowledge of our specific interests to be necessary in providing useful results to us. Thus, many projects were established in which the principal investigator was fully knowledgeable of who we were and exactly what our interests in the research were. Others were simply provided funds through a covert organization and had no idea of ultimate CIA sponsorship.

The degree to which individuals others than the principal investigator needed to be witting of the agency's connection to the research varied. It was generally left to the principal investigator to advise us as to whether anyone else in either his research tem or in the administrative part of the university or research organization needed to be made witting to the agency's relationship. To the best of my remembrance, although for general security reasons we were eager to keep this kind of information to a minimum, we went along with the principal investigator's desires and cleared and briefed whomever he felt was necessary.

The general subject of why we felt it is necessary to use funding mechanisms like the Society for the Investigation of Human Ecology or the Geschickter Fund for Medical Research needs some comment. This involves the more general question of why we felt all of this research needed to be kept secret insofar as Agency sponsorship was concerned. The reason, however, it may seem with the benefit of hindsight, was that we felt any potential enemies of this country would be greatly benefited in their own possible future aggressive acts against the United States if they were forewarned as to what the nature and progress of our research in this field was.

The largest overall picture that can be given of this group of academic and other formal research undertaking is that they were an attempt to harness the academic and research community of the United States to provide badly needed answers to some pressing national security problems, in the shortest possible time, without alerting potential enemies to the U.S. Government's interest in these matters.

In all cases, research results were published through the normal overt channels for publication of medical and physiological research. I would like to remind the members of the committee that at this point in history the amount of available reliable data on LSD and similar materials was essentially nil.

I understand from reading newspaper accounts that one of the principal interests of this committee in this kind of research is the degree of protection that was afforded to the subjects used in those experiments where human subjects were used. As far as the Bureau of Narcotics project is concerned, my impression was there was no advance knowledge or protection of the individuals concerned. The only comment I would like to make on this is that, harsh as it may seem in retrospect, it was felt that in an issue where national survival might be concerned, such a procedure and such a risk was a reasonable one to take. I would like to remind the committee again that, as far as those of us who participated in this work were concerned, this country was involved in a real covert war in the sense that the cold war spilled over into intelligence activities.

Insofar as protection of individuals in the bulk of this work, as represented by formal research projects, is concerned, the matter of informed consent and protection to the volunteers participating was left to each investigator according to the standards that either he or his institution felt were appropriate to the situtation. Our general feeling was that if we chose reputable and responsible investigators, appropriate standards in this area would be used. I think, in general, the procedures actually used in these experiments were

representative of what was considered to be adequate safeguards at the time.

I might add I fu'ly realize those standards have changed since then.

A comment should be made on the kind of interest that the agency had in these matters and how it may have changed over the years. The original impetus for the work, as mentioned above, was the concern that aggressive use of behavior-altering techniques against this country by its enemies. Although this remained a continuing and probably primary focus in the history of these projects, the agency did become interested in the potential use of behavior modification techniques in unforeseen circumstances that might occur in the future.

It is undoubtedly true that some of these research activities were continued into the middle or late 1960's when, in looking backward now, the real possibility of their successful and effective use either against us or by us was very low. In fact, I remember writing a report when I was on detached assignment with another unit in the clandestine services in about 1961 which concluded that the potential effectiveness of these techniques and the inclination of American intelligence officers to use them was limited. The only reasons I can provide now for the continuance of a small number of these activities was that we felt we needed to be more certain than we were of these negative results and also that we felt a need to maintain contact with individuals knowledgeable in these fields to keep ourselves abreast of what was happening.

I might add that I left out here, and I will freely admit to a certain amount of bureaucratic inertia that always takes place in the shutting off an ongoing activity. That certainly was a factor.

In conclusion, I would like to comment on three things which trouble me very much about the situation I find myself in.

First, there have been many references in the press to attempts by me to avoid testifying. These allegations are without any basis in fact, either in terms of "hiding" or making myself unavailable to congressional committees.

In the case of my testimony before the Church committee in 1975, I voluntarily and immediately returned from India as soon as I was made aware at the missionary hospital, where I was performing voluntary services, that I might be needed. I have been available for all legitimate inquiries at all times through my counsel.

Second, I feel victimized and I am appalled at the CIA's policy, wherein someone or some group selectively pinpoints my name by failing to delete it from documents released under the Freedom of Information Act without any permission from me. That is, my name is selectively left on released documents where all or most others are deleted. I have a great concern for past, present, and future employees of the CIA involved in sensitive, difficult, and potentially misunderstood work, as this policy of selective disclosure of individuals' names gets applied to them. I am sincerely concerned that the CIA's ability to recruit clandestine assets in the future would be severely impaired.

Third, my concern is for the reputations of the many individuals not employees of the agency, in academic and professional life who, for the most patriotic and constructive of reasons, and guaranteed both by myself and the Agency of confidentiality and nondisclosure, chose to assist the Agency in its research efforts over the past years. By now, in today's climate, the association in the news media of any

name in the academic or professional world with CIA brings immediate and automatic negative connotations and irreparably damages their reputations. With regard to my testimony, I hope this committee will understand my reluctance, except when absolutely essential, to mention other names. I am desirous and willing to share my knowledge of matters of interest to the committee that I have in my memory but, whatever the CIA's policies may be on this matter, I feel it is a point of personal responsibility to honor the commitment of confidentiality that I feel toward these individuals and not to be a party to further damage their reputations.

In summary, I would like this committee to know that I considered all this work—at the time it was done and in the context of circumstances that were extant in that period—to be extremely unpleasant, extremely difficult, extremely sensitive but, above all, to be extremely urgent and important. I realize that it is difficult to reconstruct those times and that atmosphere today in this room.

Another thought that I would like to leave you with is that should the course of recent history have been slightly different from what it was, I can easily imagine a congressional committee being extremely critical of the agency for not having done investigations of this nature.

At this point, with your permission, I would like to interject two or three incidents very briefly to illustrate this point if you will permit that.

Senator KENNEDY. Fine.

Dr. GOTTLIEB. I did not write them here because they were not recalled. One is on at least two occasions in the past, I and an associate of mine briefed the physician of the then President of the United States on the inherent dangers and alerted them as to what to look for should a covert attack against the President of this nature be made.

The second point involves an incident that happened not too long ago where, in connection with a Presidential visit to a potentially hostile country, is the best way I can say it, the physician along on this visit, when he came back, reported some—I do not quite know how to describe it—some unusual feelings he and several other members of the party had, and an associate of mine, someone who worked for me, with knowledge of this whole research, was able to counsel with him as to what this kind of behavior might mean.

I just use this to illustrate but the bottom line on this whole business has not been written as far as I am concerned.

In any case, it is my simple wish to be as helpful as possible to this committee in obtaining its appropriate legislative goals, and I am prepared to be as helpful and forthcoming as possible in the areas in which you are interested.

Senator KENNEDY. We will indicate at the outset that Dr. Gottlieb is testifying pursuant to a grant of immunity. I think it is important that the record reflect that.

Mr. LENZNER. Thank you, sir.

Senator KENNEDY. We will be glad to include it.

One point in terms of the availability, Dr. Gottlieb, you made reference to that in your formal statement. The fact is, just in terms of our inquiry, we were unable to get any conversation or any information from you until we had the grant of immunity. We had other agents who we had requested to come and who came. Others, we had to subpena to come. But really you were the only one that—well,

others talked with us and would come back with a grant of immunity, but you are the only one who insisted on the grant of immunity to come and talk. I do not want to make more of that than that statement or comment, but I think, since you really brought this up in terms of availability, I think probably the record ought to at least indicate what our understanding of the availability would be.

Mr. LENZNER. Senator, if I could comment on that.

Dr. Gottlieb, following our advice and counsel, strict advice and counsel, has been available to congressional committees and other sources pursuant to a grant of immunity. But he is relying on our advice and counsel, not to discuss or waive any legal rights that he might have prior to this formal legal process taking place. But he did come in a day earlier at your staffs' request to review these materials, and we have tried to be cooperative to the extent of 6 days of testimony before the Senate Select Committee, and now his testimony today.

Do you want to add anything to that?

Dr. GOTTLIEB. No.

Senator KENNEDY. Before I get into the flow of the questions, let me see if I understand one of the add-ons that you made in terms of a Presidential visit to a foreign country. Upon his return, the President and his party sought and counseled with you about the——

Dr. GOTTLIEB. Excuse me, it was not me personally. It was someone who worked for me.

Senator KENNEDY. Associated with you. But they told you of this.

Are you suggesting that at least these people, the Presidential party, were drugged by a foreign country?

Dr. GOTTLIEB. I am suggesting that they wanted to help them review and determine whether that might have happened.

Senator KENNEDY. Did they look into that? Did your associate look into it?

Dr. GOTTLIEB. Yes.

Senator KENNEDY. Did they make any judgment?

Dr. GOTTLIEB. I cannot give you a precise answer on that, nor am I sure it is appropriate for me to, but the fact is that I cannot.

Senator KENNEDY. You could tell us if the——

Dr. GOTTLIEB. I am going to try to be as responsive as I can. My remembrance is that they decided it was an indeterminate thing that long after the incident they could not, at least unequivocably, conclude that this behavior was due to some covert drug.

Senator KENNEDY. Can you tell us what year this happened?

Dr. GOTTLIEB. I am not precisely fixed in the year. I would say it was approximately 1971, approximately.

Senator KENNEDY. So I gather the results were inconclusive.

Dr. GOTTLIEB. Yes, that is my remembrance. I do not have a sharp detailed remembrance.

Senator KENNEDY. Would the other agency know that?

Dr. GOTTLIEB. I just do not know. I bring it up only in the context of illustrating that we are walking in a margin here, on a border where, you know, the relevance of work like this and the urgency of where, you know, it, that the final answer possibly has not been written.

Senator KENNEDY. Well since you raised it. I am interested in the specific circumstances which you raised here.

I think there are extraordinarily great implications on it about a Presidential party. I think that that is something that is worth knowing about.

Is the Intelligence Committee familiar with those——

Dr. GOTTLIEB. I really do not know.

Senator KENNEDY. Senator Chafee is on the Intelligence Committee. I do not know whether or not you want to pursue this, Senator Chafee. We want to get back into our other areas, but I think it is worth at least finding out more about this incident.

Just finally on this, is there any way you can describe to us the type of behavior that was of concern to the Presidential party?

Dr. GOTTLIEB. Yes.

My best recollection is that it was disoriented, unusual in terms of the person's normal behavior. I can only give you a general description of it.

Senator KENNEDY. Is this just the Presidential party or did it include the President?

Dr. GOTTLIEB. My recollection is that it certainly did not include the President.

Senator KENNEDY. The Presidential party?

Dr. GOTTLIEB. Yes. And specifically it included the physician himself and some of his associates. You know, inappropriate tears and crying, I remember was part of this manifested behavior.

Senator KENNEDY. If we may go back a little bit, just in followlng through your experience, Dr. Gottlieb. I think you tried to put this program in some perspective, the program of drug testing on unwitting subjects.

What was there about the times that caused you or your colleagues in the Central Intelligence Agency to undertake that project, the overall MKULTRA research project?

Dr. GOTTLIEB. The feeling that we had was that there was a real possibility that potential enemies, those enemies that were showing specific aggressive intentions at that time, possessed capabilities in this field that we knew nothing about, and the possession of those capabilities, possible possession, combined with our own ignorance about it, seemed to us to pose a threat of the magnitude of national survival—as I said, hard as it may be to imagine that in this room at these times.

Senator KENNEDY. You mentioned sort of concrete examples up to the time you left the agency. Those concrete examples go right up through 1972, 1973.

Dr. GOTTLIEB. My best recollection is that a unit in the agency, the Counterintelligence Unit, who keeps track specifically of activities of other intelligence services, keeps a running account of those instances, and the degree of reality to them. In other words, how well they can be documented. I have looked at this file several times for obvious reasons during my various responsibilities in the CIA, and that is why I know it is both growing and real, and as far as I know, up to the time I left the agency, current. In other words, what I am trying to say is there are well-documented instances of this country's potential enemies' specific use of covert drug administrations against Americans and others.

Senator KENNEDY. Your information is that it is continuing at the present time?

Dr. GOTTLIEB. I cannot talk about anything after 1973.

Senator KENNEDY. Up through 1973 though, covert drug administrations were being used?

Dr. GOTTLIEB. That is my impression.

Senator KENNEDY. That is your impression and your information?

Dr. GOTTLIEB. I am afraid I might be giving you a misimpression, Senator, and that is I am not saying they used LSD or psychogenic material. I am saying that the general method of operation of covert administration of drugs is well documented.

Senator KENNEDY. Do you want to just tell us the type of things, the most recent times that you were——

Dr. GOTTLIEB. I cannot remember them. The list is long. As I say, it is impressive that way. The ones I remember, the specific remembrance I have are drugs which totally incapacitate individuals in a manner so that documents can be stolen. In other words, basically insensate, and this would be, as I remember it, because it has been in the press several times, American and other couriers and military attaches have had this sort of thing happen to them.

Senator KENNEDY. Are we talking about a handful of cases or are we talking about hundreds, thousands?

Dr. GOTTLIEB. We seem to have trouble with precise figures because I do not have that in my head. In this particular one, I realize this is a sensitive and important issue, and I do not want to make misstatements, so I would rather not use a number and be imprecise.

Senator SCHWEIKER. Could I ask, are you talking about a handful or more than a handful?

I think we ought to have some——

Dr. GOTTLIEB. If you mean by handful, five, it is a lot more than that.

Senator KENNEDY. You listed a long list in your earlier testimony.

Dr. GOTTLIEB. By long, I mean more than 20. I do not remember how much longer.

Senator KENNEDY. Can you tell us how and why the first safehouses were set up?

Dr. GOTTLIEB. Yes.

To repeat briefly what I said in the statement, that after becoming acquainted with the Bureau of Narcotics agent with an interest and background in this, he and I worked out an administrative arrangement, and I might straighten one thing out here that has appeared in several places, both in the press and elsewhere, and that was that this narcotics agent worked for CIA. As far as I am concerned, in my remembrance of all of these matters, that is a total distortion of what happened. He remained a very active and, I understand, effective Bureau of Narcotics agent and administrator; that he felt that his interest and ours could be successfully intermingled. And the nature of the things that he did for us were indeed not things that he would say, well, now, I am doing this for CIA. They were meant to be useful in his own work to the extent that he felt that way. I just want to straighten that out. He never worked for CIA.

He was a member of another Government agency who was cooperating with us in using facilities that this agency did not feel they could afford or were relevant.

Senator KENNEDY. But the fact is, is it not, that you really started the program in terms of this——

Dr. GOTTLIEB. Oh, yes, that is a fact.

Senator KENNEDY. They were really started by you and George White, Morgan Hall?

Dr. GOTTLIEB. Yes.

Senator SCHWEIKER. Were any of these agents paid by the CIA, or were all their salaries paid by the——

Dr. GOTTLIEB. By agents——

Senator SCHWEIKER. I mean any of the people involved in the drug experiments, who administered drugs or ran the safehouses, people from the Bureau of Narcotics. Were any of them paid by the CIA while they did this work?

Dr. GOTTLIEB. There was one unusual period that I would be happy to go into of no longer than 3 to 6 months that, due to special circumstances, I will relate to you as best I understand them, we did pay Mr. White's salary.

As I say, just for a period of 3 to 6 months.

Senator SCHWEIKER. Any others, or is that the only one?

Dr. GOTTLIEB. No. That is the only incidence. I will be glad to recollect to you what I remember about that.

Senator KENNEDY. Well, as I understand it, Morgan Hall did work for and was being directly paid by the agency for a period of approximately 3 months?

Dr. GOTTLIEB. The main point I want to make is that he was paid by the Bureau of Narcotics legitimately for all the other times. That is the point I want to leave.

Senator KENNEDY. But by the agency——

Dr. GOTTLIEB. For this short period.

Senator KENNEDY. When he was not being paid by the CIA, but was involved in this program in terms of the safehouses, he was effectively working for and with the understanding for the agency itself?

Dr. GOTTLIEB. No; no——

Senator KENNEDY. As well as the Bureau of Narcotics?

Dr. GOTTLIEB. No; I do not think that is, in my formulation, the way I would describe it at all, Senator.

Senator KENNEDY. Well, you describe it then.

Dr. GOTTLIEB. He was a working active Bureau of Narcotics officer going about his business and altering them insofar as he felt he could help us and still arrange his own affairs.

Senator KENNEDY. But he was running the program, the safehouse in San Francisco, was he not?

Dr. GOTTLIEB. Yes. But the activities in the safehouse, whatever information we were getting out of them, they all involved the Bureau of Narcotics' interests.

Senator KENNEDY. That is right. But they also involved CIA interests.

Dr. GOTTLIEB. Oh, yes.

Senator KENNEDY. Effectively, I would describe it, and this is a matter of semantics, you would effectively describe it that Morgan Hall was the operational arm of the agency in terms of the safehouse in San Francisco—that is my description.

Dr. GOTTLIEB. I have to accept the way you describe it——

Senator KENNEDY. I do not want to put words——

Dr. GOTTLIEB [continuing]. To me, and I have no axe to grind now in this area, there is no reason that I would want to make it appear that he was not working for CIA, if he was. But the fact is and the circumstances are, and I am fairly familiar with this corner of things, that that just was not the case.

Senator KENNEDY. What was his association with the safehouse in San Francisco for that period of 10 years?

Dr. GOTTLIEB. There is no question that he was the principal and practically the only person that, through whom, CIA became aware of those results from all of this that they felt they would be useful. I am not trying to dilute or mitigate or alter the fact that Mr. White was it as far as this program goes. The point I want to make though is that these were always activities that the Bureau of Narcotics——

Senator KENNEDY. Had some interest in?

Dr. GOTTLIEB. Had some interest in.

Senator KENNEDY. He was still the conduit of very sizable amounts of money during all this period, was he not?

Dr. GOTTLIEB. No question about it.

Senator KENNEDY. From the agency?

Dr. GOTTLIEB. Yes.

Senator KENNEDY. OK.

In terms of your knowledge, did the leadership of the Intelligence Agency understand this program, the MKULTRA, and did they approve it?

Dr. GOTTLIEB. My answer to that, before you made available to me the documents you have, would have been absolutely. Having read the documents, you have documented evidence of that, I think you have the Director's signature on enabling documents that got this started, and as I mentioned in my statement, my remembrance is that there was a policy review of this project, at least once a year, and more frequently than that later, and that people with responsibilities broader than mine always approved specific projects and specific expenditures of funds. As I say, my remembrance of this was very much reinforced by all the signatures on the memoranda that I saw.

Senator SCHWEIKER. In your testimony you said written approval from persons at least two levels above you was required for each project. What positions are you referring to when you speak of two levels above you?

Dr. GOTTLIEB. The reason I put it that way, Senator Schweiker, is that my own job changed. What two levels would be at any one time above me would change. For instance, when I was a branch chief, there would be more than two levels. The division chief would sign it, and the chief of then called TSS would sign it, and I do not remember now but for certain levels of funds there would have to be one or two signatures above his, depending on what the size of the expenditure was.

Also I specifically remember briefing the Director of CIA repeatedly on these matters.

Senator KENNEDY. Who were they? What was it and who were they?

Dr. GOTTLIEB. I have to be careful that my remembrance was accurate. It was certainly Mr. Dulles, Mr. McCone and Mr. Helms.

Senator KENNEDY. Did you ever brief a President?

Dr. GOTTLIEB. No.

Senator KENNEDY. Do you know if anyone briefed a President?

Dr. GOTTLIEB. I have no knowledge of that, Senator.

Senator KENNEDY. Could we go on to the focus on the safehouse operation.

What were the purposes of the safehouses——

Senator SCHWEIKER. First, may I interpose one question?

How about briefing Congress during this period? Would you have briefed Congress or would you know that Congress had been briefed on these projects?

Dr. GOTTLIEB. I really have no knowledge on that. As I understand it, the congressional briefing procedures were run, that was done by officers of the agency much higher than me, and we provided them with information. I remember forwarding information of this kind. They would decide what to use and what not. But I have no direct knowledge that Congress was or was not briefed.

Senator CHAFEE. Could I ask one question?

It is my understanding that this whole operation was so sensitive that the Inspector General himself did not know about it, is that correct?

Dr. GOTTLIEB. The only light I can throw on that, Senator Chafee, is that there was an inspection and, as I remember it, the year might have been 1957, but if you will remember from my testimony that was a period that I was disassociating myself with TSS. I was going overseas. But there was one, and I really do not know what he was shown. Certainly in the one I do remember, which was about 1961 or 1962, when I was back in TSD, the Inspector General had total access to this program. What I am saying is before 1961 there was an inspection in TSD about that time. These took place about every 7 years. Before that time I really am hazy on this point. I just do not remember.

After that time, and including that inspection, I specifically remember the Inspector General being made privy to this whole program.

Senator KENNEDY. As I understand, the Inspector General recommended a termination of this in 1963 on the unwitting part of——

Dr. GOTTLIEB. That was not what he recommended, Senator. What he recommended, Senator, was that the Director make a new determination as to whether he wanted it to continue or not.

Senator KENNEDY. He questioned, as I understand, in 1963, the testing of certain drugs on unwitting U.S. citizens, is that correct?

Dr. GOTTLIEB. As I say, his specific recommendation was that the Director of the CIA be given an opportunity to again determine whether this program should continue. So it certainly raises the question.

Senator SCHWEIKER. And did the program continue after that? Was a new determination made by the Director?

Senator KENNEDY. May I just finish on this?

What was your recommendation at that time, as to whether or not it should be continued?

Dr. GOTTLIEB. This needs to be put carefully because, in the first place, the precision with which I remember this does not allow for an answer here. As I remember, I specifically remember meeting with Mr. McCone at which I was present with a whole history of this project, the pros and cons of continuing or not continuing it were presented to him for decision. The instructions that I received after this meeting was that the Director was considering this problem, had not made a decision, and specifically keep the facilities, but stand down on the unwitting testing.

Senator KENNEDY. What did you recommend? I understand that to be the end result, at least in the documents that were made available. Principally, in a standby situation, what did you recommend?

Dr. GOTTLIEB. I do not think I can accurately testify on that standpoint, Senator. My remembrance is that the pros and cons for continuing it and discontinuing it were presented by us.

Senator KENNEDY. You are familiar with the document for——

Dr. GOTTLIEB. Is that one we saw the other day? Because those documents were very helpful to me.

Senator KENNEDY. It is Intelligence Agency document, second paragraph——

Dr. GOTTLIEB. Senator, I had not seen this.

Mr. LENZNER. We did not see that the other day.

Dr. GOTTLIEB. May we take 1 minute to read it?

Senator KENNEDY. Sure.

Dr. GOTTLIEB. Senator, I have no problem with admitting that we argued for the program.

Reading this document, I have no reason to dispute it was not written by me.

One point I want to make clear is that this was a meeting, as you will see—not there for the purpose of deciding anything—it was a discussion of the whole project.

Senator SCHWEIKER. Is it true Mr. Helms recommended the program be continued, including the testing of unwitting subjects?

Dr. GOTTLIEB. Again, Senator, I want to be careful where people other than me are involved because my remembrance is not that clear. I would honestly have to be shown a document like I was just shown to refresh my memory sharply on the matter.

And right now, I cannot testify precisely as to whether he as an individual said or felt or recommended it.

Senator SCHWEIKER. Was he your boss at the time?

Dr. GOTTLIEB. At the time these discussions took place?

Senator SCHWEIKER. He was your boss as I remember it, and you said that at least two levels above yours were involved in decision-making on this program.

Senator KENNEDY. The documents show that both Dr. Gottlieb and Mr. Helms recommended a continuation of the project.

Now, can we get to the purpose of the safe houses.

Were unwitting drug tests conducted there and how many were conducted?

Let's talk about New York City.

Dr. GOTTLIEB. My answer to your question is, Senator, is that yes, unwitting administration of drugs took place there, and I say that because I never personally witnessed any but I received reports on it happening.

I am confident that it did.

That is what the project was set up for.

In response to your second question of how many, I testified after carefuly looking over all the files, that were shown to me, by best guess would be 25 to 50.

Senator KENNEDY. Including New York's safe house and San Francisco's safe house.

Dr. GOTTLIEB. My figure refers to total over all the years.

Senator KENNEDY. Over how many years?

Dr. GOTTLIEB. Well, as I say, it appeared that I feel this thing was active, was 1952 to 1965.

Senator KENNEDY. For 13 years you are suggesting that there were only from 20 to 40 individuals or groups of tests?

Dr. GOTTLIEB. That is what I am saying my best remembrance is.

Senator KENNEDY. Individuals or groups of tests?

Dr. GOTTLIEB. Senator, my impression of what went on in the safe houses was that there was a good deal of Bureau of Narcotics activity not related to drug testing that went on and this, again, I want to emphasize, is only an impression from talking to Mr. White mostly, in that lots of potential informants and other people related to the Bureau of Narcotics activities were brought in and out of these safe houses for operational reasons, and some of these individuals were unwittingly administered these drugs.

So, I am not for a moment saying that as far as what you might call operational encounters with drug enforcement and people related to the Bureau of Narcotics operations, I cannot say how many of those. I am talking about the ones that I have any reason to think were administered drugs.

Senator KENNEDY. But it was basically pretty much a joint operation, was it not, in terms of these safe houses?

Dr. GOTTLIEB. When you say, we need to be—for me to give precise answers to that——

Senator KENNEDY. Just in terms of the numbers.

As you are well familiar, having examined the checks during that period of time, there were for the undercover operations for the two safe houses, as I understand during this period of time, there were more than 200 payments that were made.

This is just San Francisco—for more than $20,000—and the New York one had considerably less. The bookkeeping, as I understand from the records that were made available, were much inferior.

How do you explain from where your name appears on a number of those checks, on the authorization for the expenditures of these matters, what does this mean to you in terms of these types of expenditures?

It would certainly seem that these places were much more active just with regard to payments than you would suggest.

Dr. GOTTLIEB. Senator, I understand your asking me for my impressions and my best understanding on interpretation of the data that these checks represent.

I am not disputing in any way that these checks were made, payments were made, some of them are hard to understand, that all of them—all of these 200-plus seem to have generic title of—what were they—not STORMY.

You said 29 or 39 or what?

Let's be careful here with the figures, 200-plus, and it referred to amounts like $50 and $100 that have titles besides STORMY, like operational purposes or something. I have no way or no reason to dispute that; in fact, they were used for operational purposes.

I do have a lot of confusion in my own mind that all of these so-called operational purposes involved unwitting administrations.

Let me make it clear, they may have. I have no reason to think that. You asked me what my impression was; my impression is derived from all the information that I can remember about this.

Senator KENNEDY. Well, could you tell us a little bit about STORMY?

Dr. GOTTLIEB. My remembrance is that STORMY was a method of referring to LSD that Mr. White used.

Senator KENNEDY. Would you tell us how extensive that was?

Dr. GOTTLIEB. Well, I think your staff can tell you that better than I can because I know it only from the documents I read which they gave me, but I believe they said there were 32 STORMY connotations.

I would agree that they probably represented at least attempts at drug administrations.

Senator KENNEDY. Many of the $100 checks, some of which are specifically marked for payment of undercover agents while administering STORMY and others, are not marked at all, were presumably used for the same purpose because they were for the same amount, cashed by the same people.

Dr. GOTTLIEB. What is the question, Senator?

Senator KENNEDY. You are aware that many of the checks say STORMY and those were LSD checks. Then we have some of those 200 checks that were to the same people, same amount, same period of time from the CIA.

I am just wondering if you can add anything to what you think——

Dr. GOTTLIEB. My processing of that information, Senator, as I said, is that they could be drug administrations, but you are asking me what my impression of the total number is, and I think that there is a difference between the $100 items that were handed out and the actual cases in which drugs were administered.

Mr. LENZNER. Excuse me one second, Senator.

Senator KENNEDY. Go ahead.

[Pause.]

Dr. GOTTLIEB. There is a point, Senator, that might have gotten a little confused as we talked about this matter. That is, that these checks to which you refer, not written by CIA, they were certainly using CIA funds. But they were actually written by Morgan Hall.

Senator KENNEDY. Right. But as you just mentioned, they could have been for drug testing, could they not?

Dr. GOTTLIEB. I certainly cannot say they were not.

I have no way of saying that.

Senator KENNEDY. That were kept up in the same accounting process in the CIA, in the same series of files, made out to the same people for the same amount during the same period of time, and there are the 32 that referred to STORMY specifically—and we have others that have MIDNIGHT and CLIMAX written on it. We are trying to find out the extent of the amount——

Dr. GOTTLIEB. I am not sitting here trying to minimize anything. That is not my effort. I am trying to be responsive to your question of what the total number of drug administrations were, and I think

the key point here is a matter of interpreting that which is not precise, namely, just what were those items used for.

I am persuaded, for instance, that every one of those $100 or $50 disbursements could have been situations where they thought they might have used drugs.

I am persuaded of that, but I am not at all persuaded that they were administered in every one of these cases.

There is no recollection I have nor have I seen any concrete evidence.

Senator KENNEDY. But the checks were cashed?

Dr. GOTTLIEB. Yes. These are returned checks.

Senator KENNEDY. In your opinion, were prostitutes used by George White for his activities in the San Francisco safe house?

Dr. GOTTLIEB. May I put this question, Senator, also in a context?

Senator KENNEDY. Sure.

Dr. GOTTLIEB. I notice only from things which Mr. White told me and things which I picked up in association with him in his activities over many years.

That is, that the general field of drug enforcement and narcotics use prostitutes and addicts and in the method of operation of an outfit like the Bureau of Narcotics, the element of prostitution is interwoven in the whole matter.

So I am certainly persuaded that as far as safe houses are concerned, there were prostitutes in them.

Senator KENNEDY. And involved in the testing?

Dr. GOTTLIEB. I have no specific knowledge of that, I would say.

Senator KENNEDY. What is your impression?

Dr. GOTTLIEB. My impression is yes.

Senator KENNEDY. You are aware that photographic surveillance and sound recordings were maintained?

Dr. GOTTLIEB. That is another matter which I think needs to be talked about in something more than a yes or no answer.

When these safe houses were set up, I do remember the attempt was made to equip them and the original intention was to have a documented sound movie, you might say, so we would know something about the behavior of people when they were administered these drugs.

To my remembrance, the movie part of it, although there was equipment put in and tried, to my remembrance I never saw nor am I aware of a movie made.

That does not mean there was not a movie made, but I find myself having an objection to an element of pornography being put into here, that is as far as I am concerned, was never there, namely some aspect of collecting pictures of prostitutes for the fun of it.

To my knowledge that never happened.

Senator KENNEDY. Well, they had authorization for the purchase of two-way mirrors, for photographic equipment and sound recording equipment. Was this paid for by the CIA?

Dr. GOTTLIEB. Yes.

Senator KENNEDY. There was no question in your mind that there was an intention of using it?

Dr. GOTTLIEB. Yes.

Senator KENNEDY. And you do not know from your own direct knowledge whether it actually was or was not used, is that correct?

Dr. GOTTLIEB. My impression was that as far as the movies are concerned, that was not used.

Senator KENNEDY. Well, anything else? Stills? Recording information?

Dr. GOTTLIEB. Not to my knowledge.

My remembrance is that the Bureau of Narcotics in their standard method of operations, either with us or independent of us, used audio recordings of meetings with informants.

Senator KENNEDY. Did the Bureau of Narcotics pay for this? I think the answer to that is no.

Dr. GOTTLIEB. You mean audio equipment used in safe houses?

Senator KENNEDY. That is right.

Dr. GOTTLIEB. No. I think the CIA paid for that.

Senator KENNEDY. They paid for all of it?

Dr. GOTTLIEB. That was considered a part of the CIA contribution. I have no argument with that.

Senator KENNEDY. They paid for it on the west coast as well as on the east coast?

Dr. GOTTLIEB. Yes.

Senator KENNEDY. Did you administer the drugs to any of your colleagues or did your colleagues try out most of these drugs themselves?

Dr. GOTTLIEB. There was a period that we have not talked about, Senator, that preceded the establishment of these safe houses, and that could have, you know, overlapped in that period when there was an extensive amount of self-experimentation for the reason that we felt that a first-hand knowledge of the subjective effects of these drugs were important to those of us who were involved in the program.

Senator KENNEDY. This is about the time of the *Olson* case——

Dr. GOTTLIEB. It preceded that and probably continued for awhile afterwards.

Senator KENNEDY. Did that *Olson* case give you any cause to rethink the testing program on unwitting subjects?

Dr. GOTTLIEB. It certainly did.

Senator KENNEDY. If it did, what were the results of it?

Dr. GOTTLIEB. I think you can understand, Senator, that that was a traumatic period as far as I am concerned. It was a great tragedy and it did cause us to consult with the people that we felt were knowledgeable in helping us make a judgment as to whether to go ahead or not.

It caused me a lot of personal anguish. I considered resigning from the CIA and going into other work because it affected me that way.

Our final conclusion was to go ahead with the work on the basis of the best advice we could get medically was that the casual connection between LSD and the actual suicide was not absolute at all, that the two were separated by a week or so. That it was a reasonable risk to take, and certainly Mr. White was told about the incident.

Senator KENNEDY. Now, just to get back to the numbers again——

Senator SCHWEIKER. May I follow this point up?

After that *Olson* incident, why didn't you consider bringing in some medical experts to exercise some sort of supervision of drug testing? After all, there were two-way mirrors in the safe house, so it could have easily been done. Medical personnel could have come to observe what

was happening so if there were any suspicious that another *Olson* incident was in the making, there would be someone on the scene to provide medical help or assistance. It seems to me that some steps should have been taken to prevent a future *Olson* case, and since you had two-way mirrors, it seems to me that one simple feasible thing that could have been done was to bring in a medical observer.

Dr. GOTTLIEB. My remembrance, Senator Schweiker, is that that may well have happened. There was a physician, in both cases there were physicians, to whom Mr. White was accredited to go, whenever he felt he needed help or consultation or advice.

I cannot recount to you now how often and how much he sought this advice.

Senator SCHWEIKER. Of course, it was not a matter of his needing help and advice; the subjects of the experiments were the ones who might have needed help. If you went through Mr. White, I am at a loss to understand how a doctor could make a judgment once removed on whether or not something ought to be done.

Dr. GOTTLIEB. That is not what I mean, Senator.

I mean that there may have been these physicians who were accredited looking at it through the mirror. I just do not know. I don't recollect.

Senator CHAFEE. I would like to ask a question if I might here.

You mentioned that in connection with the death of Mr. Olson, you personally were very disturbed, and on the basis of medical advice, as I understood what you said, the decision was made to continue with these experiments.

Who got the medical advice?

Dr. GOTTLIEB. That is not quite what I meant.

I did not mean that someone told us to go ahead with them. That would have been shirking responsibility.

Senator CHAFEE. What medical advice was received?

Dr. GOTTLIEB. As I say, I beg your indulgence as far as revealing names here, for the reason I mentioned in my opening statement.

If I can say this without revealing names, there were two physicians who knew more about LSD than anyone else at this time as far as we are concerned, on the east coast, that there were several meetings held with them, and in the decision that was made, their input into this was that the relationship between LSD and Olson's death was not necessarily causal.

Then a decision had to be made, was it important enough to take whatever risks remained after that?

Senator CHAFEE. Do I understand from your conclusions here that when all is said and done, you did not get much out of this program?

Dr. GOTTLIEB. That is hindsight, Senator Chafee, that at the time you were talking about we did not have——

Senator CHAFEE. That is right, but the part that I find interesting—and you did not know it, obviously, until you finished the program—but when you finished the program, you came to the conclusion you did not get much out of it.

Yet, in your statement you mentioned there is a growing library of documented instances of routine use by the Soviet Security Services of covertly administered drugs.

Have they succeeded where we have not?

Dr. GOTTLIEB. That is hard to say.

That is why I made the statement that the bottom line has not been written on this.

My estimate and please remember that I am at least 5 years out of date in following this field, and having access to classified information and so on, but at the time I left the CIA, my conclusion would have been that the probability of them using psychogenic materials in a finely tuned way to alter behavior was very low on the basis that we found it was very hard to do.

What I really—what really happened to people when they were under the influence of these mind-altering or psychogenic drugs was very variable, very unpredictable. The statement about the growing list has to do with the general method of operation where you unwittingly administer drugs.

The drugs that I remember mostly used in these documented cases were more in the knockout——

Senator CHAFEE. Sort of macelike?

Dr. GOTTLIEB. Not mace.

Senator CHAFEE. I do not mean mace specifically.

Dr. GOTTLIEB. Much more subtle than mace in the sense of rendering the individual unconscious so you can manipulate him.

That is a form of manipulation, so you can take his papers.

Senator CHAFEE. There is nothing subtle about this.

Dr. GOTTLIEB. It is subtle to do this successfully, covertly, materials have to be in small enough quantities, tasteless, and in fact, I remember—this is a vague remembrance, so don't hold my toes to the fire on the details of it—but there was some mention in these files I referred to about a system, a potential enemy use, where they put a sort of pipe under the door of a sleeping target and ran gas in, which would essentially anesthesize them, but had no odor so he would not be alerted to it.

And during this anesthesia, they would come into his room and search it and take his documents and so on.

But what I want to say, Senator, that is the sort of administration I mean. That is the sort of administration I mean.

Senator SCHWEIKER. After the Olson case, Dr. Gottlieb, were you given any warning from anyone about what had happened here and what should be done in the future, to your recollection?

Dr. GOTTLIEB. I have not seen papers relating to that in quite awhile, Senator, but my recollection is that there were certainly discussions, certainly, about terminating the program or going slow.

I do not want to make any inferences from your question, but my direct answer to your question is that I remember discussions like that. I certainly do not remember anybody telling us to stop the program and knock everything off.

Senator SCHWEIKER. Well, in documents provided to us for the hearing in August which we conducted jointly with the Intelligence Committee, we learned, and I quote,

On February 12, 1954, the Director of Central Intelligence Agency wrote Technical Services Staff officials criticising them for "poor judgment" in administering LSD on "an unwitting basis and without proximate safeguards" to Dr. Olson and for the lack of "proper consideration of the rights of the individual" to whom the drug was administered. On the same day that these individuals received critical letters from the DCI, the Inspector General reviewed a report on Subproject 3 of MK-ULTRA. In that report, the same CIA officers who were criticised were quoted as to the purposes of Subproject 3—the observation of unwitting persons who had been questioned after having been given a drug.

Based on that information, it would seem to me that the whole top level of the Agency was critical of what happened in terms of unwitting testing and pretty much said, "Do something differently, take safeguards, and proceed with caution—if you proceed at all."

I am not clear on what really happened after that message from the DCI, because it appears that the testing went on in just about the same way as it had before, without safeguards. Nothing changed.

Dr. GOTTLIEB. I do not know that I can help with the specifics, what really took place and what happened. I will only repeat what I do remember very clearly, Senator, but this program was reviewed once a year and my own remembrance, and as responsive as I can be to your query, we are talking about something that happened 23 years ago——

Senator SCHWEIKER. I think you will surely agree that, expecially after the Olson incident, it was something that was indelibly etched in your memory during that period of time. You must recall what happened.

Dr. GOTTLIEB. Yes; that the upper echelons of the agency were thoroughly aware that the program was continued.

I cannot rationalize for you what happened specifically after the memorandums you are referring to.

Senator CHAFEE. Could I ask one question related to that, Dick?

Along with these critical reviews by the Inspector General, and the death of Mr. Olson, do you remember any additional safeguards being taken to protect the subjects as a result of these actions, or didn't you believe that additional safeguards should be taken? Did these just go along in the same manner as they had before?

Dr. GOTTLIEB. Aside from, as I say, pondering on the whole question, and alerting people who were involved about what had happened, I cannot respond to your question any more specifically than that.

Senator CHAFEE. By alerting, you do not mean alerting the subjects, though?

Dr. GOTTLIEB. No.

Senator CHAFEE. You still had unwitting subjects, so as best you can recall, despite the concern that was shown over the death of Mr. Olson and the fact that you got medical testimony in which the whole subject of the tie-in between LSD and Mr. Olson's death was discussed—despite all of that, things went on just as in the past as far as unwitting subjects were concerned?

Dr. GOTTLIEB. Well, if you add to that statement, Senator, that there was a lot of serious discussion about whether to go on or not, my answer would be yes.

Senator CHAFEE. The decision was, don't change anything?

Dr. GOTTLIEB. Well, the best I can respond to that, that seems to be the case.

Senator KENNEDY. Just in this area, again, to get back to the numbers of people that were actually tested, you were out of the country for a period of 5 years——

Dr. GOTTLIEB. Actually 2 years.

Senator KENNEDY. Two years.

Do you know what was going on in the safe houses then?

Dr. GOTTLIEB. I have no recollection of that at all.

Senator KENNEDY. Would you assume, that there was testing during this 2-year period?

Dr. GOTTLIEB. I assume that.

I think some of the checks—well, there is no question about that.

Senator KENNEDY. The thing that I find troublesome is that with the sense of urgency that you placed on the program from the beginning, the priority that it had in terms of the directors, the briefings that had taken place, the reviews of the various programs, the indications that you were for continuation of the program and the urgency that you placed even in terms of your testimony here today, why you believe that there were only 30 individuals who were actually impacted or affected over a period of 14 years.

There is difficulty, I find, in taking both of those, juxtaposing both of those kinds of statements or comments, particularly against a background where we have scores of checks to the same people, kept in the same file, with a strong possibility for same services. And you have reservations about the breadth of the program.

I mean, 25 is just 2 a year, 2 individuals, 1 on the east coast and 1 on the west. I just think that that is difficult to accept.

Dr. GOTTLIEB. I am just trying to respond, Senator, appropriately to you, to your question.

Senator KENNEDY. Fine.

Dr. GOTTLIEB. In the first place, as far as the general concept of where this fitting into the overall program, it was conceived of sort of the last thing that might be done to get useful information.

It was not a numbers game. It was not a question of doing this hundreds of times.

As far as rationalizing the number of checks with certain amounts of money with them against estimates I told you about, I think I am mostly basing my impressions on those times that I was aware by Mr. White telling me that one of these had taken place.

Again, I want to reiterate I cannot testify that it was not administered 200 times. There was this point about the east and west coast. Please remember, actually the times that 2 safe houses existed at once were over a fairly short period.

Senator KENNEDY. We will just put in the record the numbers of cashed checks and numbers of payments during that period of time.

Let me move on.

Mr. LENZNER. Will the record reflect that there were 32 checks that were designated as Stormy checks, because the witness has testified——

Senator KENNEDY. We will print all the checks in the record, and the numbers for each period of time, and the numbers which indicate Stormy during those years as well.

Mr. LENZNER. Thank you.

Senator KENNEDY. Was the FBI involved in any of these programs?

Dr. GOTTLIEB. I am hesitating, Senator, to be sure I give you a considered answer.

My off-the-hat answer would be not to my remembrance.

Senator SCHWEIKER. To your knowledge, did any of the unwitting victims require hospitalization?

Dr. GOTTLIEB. You are talking about domestic activities, now?

Senator SCHWEIKER. In the safe houses.

Dr. GOTTLIEB. I have a remembrance. I have only a hazy remembrance of that having happened once in New York City.

Senator SCHWEIKER. Did you have other details about any such incidents? Can you tell us anything more about that case?

Dr. GOTTLIEB. No, sir.

Senator KENNEDY. Can you tell us what was learned from the years of the operation of the safe house?

Was it useful?

What can you tell us?

Dr. GOTTLIEB. I think what we learned from the safe houses was more about what you could not do than what you could do. That was as relevant as positive information.

I think the conclusion from all the activities, was that it was very difficult to predictably manipulate human behavior in this way, and that would be a summary statement I would make.

Senator KENNEDY. Obviously, you believed that the Soviets or other adversaries were doing it, as I understand it?

Dr. GOTTLIEB. We believed they might be doing it, Senator. I have tried to be very careful in explaining to you why we felt that.

Senator KENNEDY. Just with regard to the usefulness of the information, did the lessons that were learned in these houses have any operational use?

Dr. GOTTLIEB. I would have to say yes.

I think we would have been in a far worse position in terms of being able to brief the President's physicians before these trips, to field inquiries about this area, without it.

Senator KENNEDY. Do you know whether it led to the covert use of drugs by the Intelligence Agency?

Dr. GOTTLIEB. I was advised by your staff that the area of the overseas use of these drugs was not one of your primary interests.

Is that accurate?

Senator KENNEDY. Well, the details of it.

But I think if you could answer whether you know if information that was developed in these safe houses was used for covert operations overseas without getting into countries or without getting——

Dr. GOTTLIEB. My answer would be yes.

Senator KENNEDY. Can you tell us the extent of it?

Dr. GOTTLIEB. Well, the best response I can give to that, because we are in an area here that I do worry about being precise about, but I would like——

Senator KENNEDY. If you do not——

Dr. GOTTLIEB. Suggesting—I suggest you ask CIA which has that information.

Senator KENNEDY. Well, could we turn then——

Dr. GOTTLIEB. May I add one thing?

Senator KENNEDY. Sure.

Dr. GOTTLIEB. This area was gone over in extensive detail by the Church committee.

Senator KENNEDY. Fine. That is fine.

Dr. GOTTLIEB. I testified fully on it.

Senator KENNEDY. Can we turn to some of the other MK-ULTRA projects.

Did you know Dr. Geschickter?

Dr. GOTTLIEB. Yes.

Senator KENNEDY. What did he do for the CIA?

Dr. GOTTLIEB. I would divide the things which Dr. Geschickter did for the CIA in three parts.

I want to say right now that from my remembrance of our relations over a good number of years, Dr. Geschickter is exactly one of these individuals I was referring to who, out of the most patriotic and constructive motives chose to help us, and I have a deep concern for what may have happened to his reputation as a result of the disclosures that have been made.

But I would divide this in three parts:

In the first place, the Geschickter medical fund was a conduit for funding other projects, and was very useful in that way, some of which the purposes—some of which, as far as we are concerned, the reasons why we wanted to do it, were made aware to him and some were not.

The second use we made of Dr. Geschickter was he had his own medical interests that were based on his interest as a pathologist in cancer and arthritis and hypertension and several other things.

We were interested in materials which he himself was experimenting with in terms of some of the effects, side effects sometimes, that had to do with what we called material like the kind I mentioned, we had evidence others were using, knock out material and psychogenic materials, and so that was the second purpose.

The third purpose was to use Dr. Geschickter who was close to us here in Washington as general consultant. I and other individuals that worked with me would often go down and discuss a problem that we had and get his help in thinking through what the correct and appropriate approach would be.

Senator KENNEDY. But he was a witting participant in the activities of the agency.

Dr. GOTTLIEB. Yes.

Senator KENNEDY. We went over in the course of our hearings yesterday, the development of the Agency's relationship with Georgetown University.

Can you tell us what were the Agency's intentions in getting into that project to build the wing?

Dr. GOTTLIEB. Most of what I can say that I feel were the—give you useful background rest on what I read the other day.

This happened a long time ago. But my remembrance was that we considered our relationship with Dr. Geschickter a very valuable one for the reasons that I mentioned, and that the contribution to the wing was generally considered a way in which we could insure a connection with him over the years, to have these kinds of services available to us.

Senator KENNEDY. Were you doing it to make Dr. Geschickter happy?

Did you have a purposeful kind of project in mind?

Dr. GOTTLIEB. As I remember, having my memory refreshed by what I read, we had in mind a local facility, a local facility at which work could go on, and I want specifically to exclude unwitting testing from this because that was our intention here, with the kind of work that went on in other more formal MK-ULTRA projects could go on close at hand, that we could visit and see and talk to.

That was the general concept.

Senator SCHWEIKER. Did it, in fact, happen that way?

Dr. GOTTLIEB. It did not.

Looking back at it in retrospect, and reading these files in retrospect may seem—in fact, the plans that were made to actually have a facility at which formal and institutional research would go on, in areas of interest to us, was just never realized.

Senator KENNEDY. You gave the money, though?

Dr. GOTTLIEB. Yes.

Senator KENNEDY. They did, in fact, contribute $375,000.

What benefits were derived to the Agency from that?

Dr. GOTTLIEB. I would have to say in retrospect, the only benefits that the Agency derived was maintaining productive relationship with Dr. Geschickter, himself.

Senator KENNEDY. There was not any research done at the hospital?

Dr. GOTTLIEB. To my knowledge as a result of building that wing, no.

Senator KENNEDY. Well, the Director says he thought that was absolutely incredible that the Agency would be involved in that.

Dr. GOTTLIEB. My response to that is, I do not know how to respond to that.

I guess the Director is entitled to his reactions.

Senator KENNEDY. He thought, as I would gather from his testimony, that it was incredible that they would have put up the money and then not at least have derived some degree of benefit from this amount of money in it.

Dr. GOTTLIEB. I can give you a philosophical answer to that, Senator, but I do not know how helpful it would be.

Senator KENNEDY. Why do we not, if we could, go to the questions of files.

We had a lot of testimony yesterday about the way records were kept in the CIA.

Senator SCHWEIKER. Have you finished your questions on the Geschickter relationship?

Senator KENNEDY. Yes.

Senator SCHWEIKER. I have a couple of questions on that.

Along the same line that Senator Kennedy was pursuing with regard to the hospital wing, Subproject 35 of MK-ULTRA, we have here a memorandum from the CIA files.

It says that in the event of Dr. Geschickter's death, the projects will continue: "any activities under this project will be continued through the Geschickter Fund and will be unaffected by his death." The memorandum also gets very specific about what the CIA will get in return for its contribution to the building fund. I have trouble reconciling statements like these, cited by the CIA in their files, with what you just said about the relationship between CIA and Dr. Geschickter.

Dr. GOTTLIEB. My response to that is to focus—the main point I was trying to make is that there were plans made and expectations made when this money was transferred that simply did not happen.

I think those were our intentions when the project was made, and they just were not realized.

Senator SCHWEIKER. Well, also, in the same document, it says:

A memorandum of agreement will be signed with Dr. Geschickter outlining to the greatest extent possible the arrangements under which the hospital space under his control will be made available to Chemical Division personnel and the manner in which cover will be provided and other benefits obtained. The memorandum of agreement will be retained in TSS.

What is your response to that?

Dr. GOTTLIEB. I read that memo the other day.

My response to that, as best as I can recollect, the intentions were to do just what you read, to get such a memorandum of agreement.

I am not aware that that was ever actually done, Senator.

Senator SCHWEIKER. You do not have any recollection of such a memorandum of agreement?

Dr. GOTTLIEB. I have a good recollection of the memorandum you read, Senator.

Senator SCHWEIKER. What about the memo referred to in the document I just read from?

Dr. Gottlieb. The memo of agreement that Dr. Geschickter actually signed or any implementation of the series of events that you read from that memo——

Senator SCHWEIKER. Did you ever discuss such a memorandum of agreement with Dr. Geschickter?

Dr. GOTTLIEB. I was not dealing with Dr. Geschickter at the time.

Senator SCHWEIKER. You were not?

Dr. GOTTLIEB. I personally was not.

Senator SCHWEIKER. This project was under your direction?

Dr. GOTTLIEB. It was. The man that worked for me dealt with it.

Senator SCHWEIKER. The project descriptions said three CIA biochemists or scientists would be provided cover as one of the benefits the Agency would get in return for its contribution.

Were they, in fact, provided cover by this project?

Dr. GOTTLIEB. I would have to answer that the way I did before, these things were never implemented.

Senator SCHWEIKER. That was not implemented either?

Dr. GOTTLIEB. No, sir, to the best of my recollection.

Senator SCHWEIKER. How was the funding for this wing handled? In other words, how was the $375,000 payment made?

Dr. GOTTLIEB. I do not remember the fiscal details.

My remembrance was helped by reading these files the other day—was the question of whether the CIA could legally do this certainly came up, and extensive legal opinion and approval right up to the Director was received for it.

But as far as the details of how the money was transferred to the university, aside from the fact that it was put in the Geschickter Fund as an intermediate step or there may have been other intermediate steps depending on what techniques they used, I am not specifically aware of that.

Senator SCHWEIKER. Dr. Geschickter said yesterday that funding was provided by either "a" Philadelphia Foundation, or "the" Philadelphia Foundation.

I wonder if you could shed some light on that?

Dr. GOTTLIEB. I have no recollection on that.

I want to make it clear, I am not disputing Dr. Geschickter's statement.

But I remember no details about a Philadelphia Foundation.

Senator SCHWEIKER. Why did not these plans come off?

We have a very elaborate project description, with pretty detailed planning. It was approved at the highest levels of the Agency. A lot of money was spent. By all indications, the project seemed to have very high priority, as an important integral part of your program.

Here is a very detailed, specific memorandum containing the justifications for it. Why did not the plans come off?

Dr. GOTTLIEB. May I have my memory refreshed on the date of that memorandum?

Senator SCHWEIKER. Yes.

Dr. GOTTLIEB. Because I think that is relevant to my giving a responsive answer.

Senator SCHWEIKER. It looks like the dates have been sanitized.

Dr. GOTTLIEB. My suspicion is that the period after the event you talk about may have happened when I left.

Short of being reminded of the date, my response to you, Senator Schweiker, would be that I would have to say probably here expectations of either finding people to do this, qualified people who were trained medically and technically to do this work, could have turned out to be very hard to do, or it could have been, also, that the whole thing, faced with the reality of implementing it, could have seemed like an infeasible thing to do.

I also want to add that efforts to implement research, particularly with the complexities, the extra complexities of this kind of cover and so on, I mean with research efforts they often are expensive and do not yield results.

Senator SCHWEIKER. That would have been perceived before the project was designed approved, wouldn't it? You do not have to be an expert in spying to figure out that doing these kinds of things at Georgetown University would present some horrendous problems, particularly if you were going to try to do it on an unwitting basis.

I have to believe those problems were known before the project was OK'd and that they certainly were taken into account before it was approved. Still, notwithstanding all of these things that you are pointing out now, the files indicate that the plan was to go full speed ahead with this project.

Dr. GOTTLIEB. I really do not know how to respond to your query.

Senator SCHWEIKER. We have the date on the document you asked about—I believe it's 1955.

Dr. GOTTLIEB. I did not think that would change my response.

Senator KENNEDY. The Senator has been good enough to yield.

I just have a couple remaining areas, Dr. Gottlieb.

One is on the area of files.

We had a lot of testimony yesterday about the way the files were kept in the CIA.

Some people talked about two sets of files, one detailed summary of the project, and another boilerplate.

The boilerplate had various meanings. It was unclear whether it represented an accurate summary or a misleading summary.

Could you help clarify the recordkeeping system at the Agency?

Dr. GOTTLIEB. As far as I am concerned, based on the files that I looked at Sunday, those files in the sense of a fiscal interest, with justifications that were involved in the Agency's regulations at the time were reasonably accurate.

Your reference to boilerplate could be interpreted in several ways I will do it in my own way.

I am not aware from reading those that there was, either a purposeful misrepresentation in what you are calling boilerplate, nor was there an inference that this was one of two sets of files.

The two sets of files that I understand would be, one, the files that you now have; and two, substantive set of files which contain a lot more technical detail.

Senator KENNEDY. Do you feel the summary documents, the ones with your name on them, always represented the core or essence of truth of what was going on in the particular project?

Dr. GOTTLIEB. I looked at a lot of files, Senator.

I would say in a general statement, the answer is yes.

Senator KENNEDY. Can you tell us about why you destroyed the files, and which ones you destroyed?

Dr. GOTTLIEB. May I read a statement that I made?

I think it will be the shortest way to answer that.

I made this before to the Church committee, and there has not been anything changed in respect to this.

There were three reasons.

One, as with the other files which were destroyed in a continuing and important CIA program of files destruction to handle a burgeoning paper problem there was constant pressure to retire files and to destroy those files which had no further use.

Two, with my retirement and that of others connected with this work, and with the drug work over and inactive for several years, these files were of no constructive use to the Agency. They were the kind of sensitive files that were capable of being misunderstood by anyone not thoroughly familiar with their background.

Three, the files contained the names of prominent scientists, researchers, and physicians who had collaborated with us and who had been assured that their relationship with CIA would be kept forever confidential. I felt that the careers and reputations of these people would be severely damaged or ruined, for instance, in today's climate of investigations, if their names and CIA connection were made public. I felt a special deep personal obligation to respect this assurance of confidentiality and to make as certain as I could that these particular CIA sources would never be revealed.

I am sorry, I left out the preamble.

In late 1972 and early 1973, I began to systematically clean out and destroy files and papers which we felt were superfluous and not useful, relevant, or meaningful to my successors.

In the case of the drug files, I specifically checked with my superiors to obtain authorizations and concurrence to destroy these files.

My reasons for feeling that they should be destroyed were essentially threefold and had absolutely nothing to do with covering up illegal activities.

Senator KENNEDY. I would imagine if these were just paperwork you would not have to check with a superior, would you? This was something more involved than just eliminating paperwork, was it not?

Dr. GOTTLIEB. I tried to make clear I was aware there was more involved, that is why I checked——

Senator KENNEDY. Who did you check with?

Dr. GOTTLIEB. I checked with Mr. Helms, who was then Director.

Senator KENNEDY. Did he order the destruction?

Dr. GOTTLIEB. Certainly did not order them, he concurred.

Senator KENNEDY. You requested they be destroyed——

Dr. GOTTLIEB. No, no.

I requested, I was really asking his authorization to destroy them.

One needs to make a decision always as to what you need to go to your superiors for.

Senator KENNEDY. You felt you should on this one?

Dr. GOTTLIEB. Yes.

Senator KENNEDY. So, certainly, the paperwork aspect was not really the overriding concern that you had. It was these other reasons?

Dr. GOTTLIEB. No, I would have to add that that was the motive behind my going through all my files.

Senator KENNEDY. You are not trying to leave the impression that that was either a principal justification or reason to destroy the files, are you?

Dr. GOTTLIEB. I am simply saying it was one of them.

Senator KENNEDY. The thing that I suppose we would have to understand, having been given the kind of priority that you stated this program would have, your own strong commitment to it over the record of the exchanges we have had this morning and the other record, and your belief in the importance of this in terms of security reasons, that you felt that this kind of program was continuing all the way from 1973 when you left the Agency. I would have to ask why you felt that the national security reasons justified their destruction?

Dr. GOTTLIEB. Senator Kennedy, I think a careful search of the records would show that it was me that terminated this project and that I many times gave the reasons why.

The fact that at one period in history I felt strongly this was a relevant and urgent program, and that in another time later, I specifically not only recommended but implemented its termination, to me are not inconsistent.

Senator KENNEDY. Well, you indicated to us that at the time you left in 1973, that the use of the hebavioral kinds of drugs was at least still being continued by adversaries.

I mean, you gave that certain impression to us.

And you spelled out very clearly in your formal statement and others that you felt this program was of a great kind of importance.

I am just wondering, when you suddenly went along on justification, you urged its continuation in 1963, why at some point you suddenly decided that the national security interests were not served by at least keeping the information and material that had been gathered from all these expenditures and from all the work that was done.

Dr. GOTTLIEB. One response to your question, Senator, would be that the substantive technical work done on 99 percent of these projects was published in open literature and available. There was nothing useful in the files that could add to that.

The second point is, I must come back to what period of time we are talking about.

As I tried to say, there became a growing realization that whatever the foreign threat might be by 1973 or even earlier than that, that that was not a justification to do any more than keeping in touch with several individuals in this program to be able to answer questions that might come up, that a program of this kind was no longer justified.

It was not that the threat may have lessened, it was what we could usefully do about it.

Senator KENNEDY. You made that decision in 1973?

Dr. GOTTLIEB. No, no.

I would have to examine the files. The decision was a growing one. I think your own examination of the files was showing that although this may have been a formal official determination of it then, the thing tapered off to almost nothing by 1967 or 1968.

Senator KENNEDY. But the destruction, the decision to destroy——

Senator SCHWEIKER. Is it not true that your Deputy objected to the destruction of files for the reasons that we are getting at here?

Dr. GOTTLIEB. I have only heard that as a rumor.

I have never seen a memo on that subject and never discussed it with the person who was my Deputy at the time.

I do not know whether you are saying he told you he objected to it or whether he told you he told me. He might well have. A person can have different feelings about it.

Senator SCHWEIKER. When you discussed it with your Deputy, do you recall his having objected to destroying the records?

I have got to believe he would have expressed his reasons for objecting to it to you, that he would give you his opinion.

Dr. GOTTLIEB. I do not recall that discussion with the person who was my Deputy. I have no recollection of it.

I am not saying it did not happen. He says it did.

Senator KENNEDY. Dr. Gottlieb, Senator Schweiker is just going to continue the questions.

I have asked him to ask a brief one for me at the conclusion.

I have to excuse myself. I appreciate your presence here.

Senator SCHWEIKER. Dr. Gottlieb, going back to the role played by Dr. Geschickter and the Geschickter fund, did Dr. Geschickter in essence oversee expenditures of several million dollars worth of projects or channeled through his fund, acting as a conduit?

Dr. GOTTLIEB. I would say I would have to disagree with the first part of your statement and agree with the second one.

Senator SCHWEIKER. You state your understanding of the relationship.

Dr. GOTTLIEB. He provided the conduit for sums of money in the amount you are talking about. He certainly was not asked to supervise——

Senator SCHWEIKER. You did say earlier he was used by you in some consulting capacity occasionally?

Dr. GOTTLIEB. But not necessarily on the project.

Senator SCHWEIKER. Not on these particular projects?

Dr. GOTTLIEB. Yes.

Senator SCHWEIKER. He cited the figure of about $2.3 million, as I recall, as the amount of money that his fund handled for the CIA.

Does that ring a bell with you?

Dr. GOTTLIEB. I would have to say that seems reasonable.

Senator SCHWEIKER. In listening to your description of the functions that Dr. Geschickter performed and in reading the CIA files about the relationship, there is obviously a wide, unaccounted for discrepancy between what the files say and what, in fact, according to both you and Dr. Geschickter happened—particularly in terms of the agreement which was supposed to be worked out for use of the facility at Georgetown, the Gorman Building, the planned experiments which you say were not conducted there, the use of patients as subjects, et cetera. Might we view this building fund contribution as the CIA's donation to Dr. Geschickter's favorite charity in order to keep him as an ongoing consultant to the CIA?

Is that really what we are seeing here?

Dr. GOTTLIEB. Are you asking me, Senator, whether that is my perspective?

Senator SCHWEIKER. Yes.

Dr. GOTTLIEB. No, it is not my perspective.

Senator SCHWEIKER. Here is agreement that nobody lived up to, which did not mean a thing. It almost looks like it was written down as a sort of charade. Nobody knows about the facility providing any cover, nobody knows about having one-sixth of the space available for clause, nobody tested anything there no people went in and out on any specific research projects. Nobody knows about anything that was to be included in the agreement ever happening.

I do not know what other conclusion I could draw except that it looks like a goodwill offering to Dr. Geschickter.

Dr. GOTTLIEB. The only light I could throw on that is to repeat what I said before.

My perspective is these were plans that there were intentions to carry out, that just were not.

Senator SCHWEIKER. It seems like the CIA went to an awful lot of fuss and bother, and it seems also that the problems that you mentioned a few moments ago—security problems, and so forth—all of those problems were known before this agreement was worked out. To do the sort of things described in the proposed agreement, at Georgetown—even if only willing subjects were used—would surely have raised red flags. Yet the project was approved.

I come back to the fact that it looks to me as if it was an artificial device for keeping Dr. Geschickter happy because he was useful to the CIA in some sort of consultant role.

Dr. GOTTLIEB. You said something there that I need to understand better. Did you say witting or unwitting?

Senator SCHWEIKER. Witting, even if the intention was only to use witting subjects. Maybe I did not say that.

Dr. GOTTLIEB. It is helpful, Senator, my perspective on this was that of an expensive project that just never took place.

If you are saying, was it wasteful, my answer would have to be yes in terms of CIA's interest.

Senator SCHWEIKER. The project may not have taken place, you say, but every one agrees that the project was paid for—the money was spent. You are saying in your opinion it was not a matter of donating to Dr. Geschickter's favorite charity to keep up a good relationship there for consulting purposes?

Dr. GOTTLIEB. I mentioned before when this subject first came up that an element in trying to implement this was to insure the continuation of all three services that I mentioned we were getting from Dr. Geschickter, that that was an element.

But I certainly would have to say, no, the perspective you mentioned was not mine.

Senator SCHWEIKER. You mentioned it in your statement that a number of the projects in MK-ULTRA, I guess all of those conducted at the universities, were ultimately published, am I correct?

Dr. GOTTLIEB. Most of them.

Senator SCHWEIKER. Most of them.

Dr. GOTTLIEB. To the extent that information was published that was publishable. What I really mean is, that they were not the kind of things that were developing data that was considered secret.

Senator SCHWEIKER. If that was true, why did we feel that "potential enemies of this country would be greatly benefited," as you also say in your statement, if they knew about the nature and progress of our research. I am confused by your apparent concern about our enemies' learing about our work, when at the same time you make the observation that most of this work was published in the open literature anyway.

Can you clarify that?

Dr. GOTTLIEB. I think I understand the reason you are confused.

What I was trying to make clear there was that if you turn the situation around, this country's intelligence organs would find it very valuable if they could establish that another country's intelligence organs are sponsoring a coherent group of projects and would draw some pretty accurate conclusions as to specifically what their interest might be.

Senator SCHWEIKER. Let's look at some examples here from the CIA files about the kind of research that the Agency had in mind, areas of research which the research and development program of the TSS Chemical Division was supporting.

In a document relating to subproject 35, which of course was connected with Dr. Geschickter and his fund, we find a list of materials and methods the Agency was interested in. I'll read a few items:

1. Substances which will promote illogical thinking and impulsiveness to the point where the recipient would be discredited in public.
2. Substances which increase the efficiency of mentation and perception.
3. Materials which will prevent or counteract the intoxicating effect of alcohol.
4. Materials which will promote the intoxicating effect of alcohol.
5. Materials which will produce the signs and symptoms of recognized diseases in a reversible way so that they may be used for malingering, etc.
6. Materials which will render the induction of hypnosis easier or otherwise enhance its usefulness.
7. Substances which will enhance the ability of individuals to withstand privation, torture and coercion during interrogation and so-called "brain-washing".
8. Materials and physical methods which will produce amnesia for events preceding and during their use.

And the list goes on.

Surely, these would not be normal kinds of university projects that we are discussing?

Dr. GOTTLIEB. I think data which was developed on all but a small amount of the work that was done in normal university settings indeed was done to get basic data that we felt did not exist that were relevant to these questions.

Senator SCHWEIKER. The list also includes research into physical methods of producing shock and confusion over extended periods of time and capable of surreptitious use; and substances which produce physical disablement such as paralysis of the legs, acute anemia, etc.

These certainly would not be published?

Dr. GOTTLIEB. They would not be published under the headings that you are talking about, but a researcher doing the actual work that needed to be done, first, on animals, to get this kind of data, would certainly have a lot of data that was perfectly publishable, and did not necessarily mention these ends.

A potential enemy analysis of a whole group of projects could very readily lead him to those conclusions.

I do not know if I make that clear.

Senator SCHWEIKER. I guess so. I think it's important to point out that in the same document where this list appears, explicit reference is made to human testing, which raises problems that "cannot be handled by the ordinary contractor."

I had earlier asked the Director on two occasions about brain concussion studies.

One of the project descriptions refers to testing fluid-filled flasks and using other means in an attempt to find out how the brain is shocked by concussion or blast effects. At one point I was told that it was an Office of Naval Research project and the CIA was only indirectly interested.

Then, DOD came back today and said just the opposite, that this, in fact, was a CIA project, and the Office of Naval Research was just a conduit for CIA funding.

Can you tell us more specifically about the brain concussion studies? Was that one of your projects?

Dr. GOTTLIEB. I do not have that—I want to be very careful. I am not saying it was not, Senator, but it happened a long time ago, and I did not see any data on it.

And if I was going to be as responsive as I would like to be to your question, I would like to have my memory refreshed.

Senator SCHWEIKER. We will get that for you in a moment.

Did you work closely with Dr. Robert Lashbrook?

Dr. GOTTLIEB. Yes.

Senator SCHWEIKER. During the course of your association, did you discuss the details of safe house projects as well as other MK-ULTRA projects with him?

Dr. GOTTLIEB. My impression would be that I certainly did, but if you ask me to name instances when I did, or afternoons that I did, I would be very hard pressed.

Senator SCHWEIKER. What capacity was he in at the time that you worked closely with him?

Dr. GOTTLIEB. I think, as I remember, he was my deputy.

Senator SCHWEIKER. Would it not be fairly natural that almost all operational material and information would be available to him, with few exceptions?

Dr. GOTTLIEB. Pardon me?

I am consulting with my attorney because there is another individual involved here and I do not want to unknowingly harm him.

Senator SCHWEIKER. All right.

[Short pause.]

Senator SCHWEIKER. Do you have a response?

Dr. GOTTLIEB. I need to be reminded of the question because I thought the question was: Do I remember or should he have had knowledge of everything going on——

Senator SCHWEIKER. Because he was your deputy.

Dr. GOTTLIEB. My impression is "Yes."

Senator SCHWEIKER. Here is the documentation relating to the brain concussion project.

You are specifically listed as an accredited CIA technical liaison representative for the project, along with another person.

Dr. GOTTLIEB. Remember, Senator, I did not deny knowledge of this.

Senator SCHWEIKER. I am trying to help you remember.

I am showing you the documents. I know you did not deny involvement in the project. I would like to establish whether or not this was your project, a CIA project—DOD said it was a CIA project.

This is a memo dated November 1954.

Dr. GOTTLIEB. Reading this, I still do not have a specific recollection of this project but I would not dispute that it was.

In answer to your question about what we were doing and why, the best answer I can give you is that it had something to do with a series of ultimate ends of the nature that you read before.

It sounds like a highly theoretical study of the kind that could be published, by the way, that would backstop and lead perhaps to other investigations. It sounds that way from reading the paper.

Senator SCHWEIKER. As I recall from reading more detailed documents that I have not put before you today, the project description also discusses what it takes to induce concussion and how to sneak up on a person and induce a concussion, and how to have that occur without the persons being witting of it. The purpose was to produce a concussion with maximum amnesia and no visible injury.

There were a lot of ramifications to that sort of research.

Dr. GOTTLIEB. Yes.

Senator SCHWEIKER. In the memorandum it lists people from CIA who have knowledge of it, and, interestingly enough, it does not list any technical people from the Office of Naval Research.

Would that not be a pretty clear indication that prime technical responsibility would have rested with you folks?

Dr. GOTTLIEB. Senator, I did not say it was an ONR project, I do not want to be held to that. I believe someone else said that.

Senator SCHWEIKER. Reading the memo, can you not make a judgment, seeing how this was structured——

Dr. GOTTLIEB. I thought I said from what I was reading there, it probably was a CIA project.

Senator SCHWEIKER. Dr. Gottlieb, what do you know about the knowledge of Mr. Anslinger, of the Bureau of Narcotics, or other Bureau of Narcotics' officials, regarding Morgan Halls safehouse activities.

In other words, how far up the Bureau of Narcotics' chain of command did awareness of Mr. Hall's operations go?

Dr. GOTTLIEB. I think the only thing I can say that might really help you on this in the sense that I am talking about my own knowledge, and not assumptions or inferences or impressions, was that Mr. Anslinger was knowledgeable of the safe houses that we set up and why.

Senator SCHWEIKER. Any other Bureau of Narcotics' officials that come to mind?

Dr. GOTTLIEB. No.

Senator SCHWEIKER. Why did the CIA take over Mr. Hall's salary for a time?

We discussed that earlier and you said this only went on for a few months. What was the rationale for this departure from the rule?

Dr. GOTTLIEB. I prefaced this by saying there is no record that has been kept of this, that what I am going to try to relate to you, and it is perhaps a little fuzzy in my mind, and I beg your indulgence there for what might seem like some discrepancies.

There was a period, and the period is exactly mentioned in some of the files that were made available to me on Sunday, where for reasons I am not entirely sure of, it had something to do with some of his past activities about some people in high places who were very angry with him, and it was useful for Mr. Anslinger to not have him specifically on the Bureau of Narcotics' payroll for a period of time.

He approached me and said, since we are in this collaborative effort, would you people be kind enough to formally take his salary for a period through me so that I could honestly say that he is working for another agency for this period. That was the background of it.

Senator SCHWEIKER. Some of the projects under MK–ULTRA involved hypnosis, is that correct?

Dr. GOTTLIEB. Yes.

Senator SCHWEIKER. Did any of these projects involve something called radio-hypnotic-intra-cerebral control, which is a combination, as I understand it, in layman's terms, radio transmissions and hypnosis?

Dr. GOTTLIEB. My answer is "No."

Senator SCHWEIKER. None whatsoever?

Dr. GOTTLIEB. Well, I am trying to be responsive to the terms that you used.

As I remember it, there was a current interest, running interest, all the time in what affects people's standing in the field of radio energy have, and it could easily have been that somewhere in many projects, someone was trying to see if you could hypnotize somebody easier if he was standing in a radio beam.

That would seem like a reasonable piece of research to do.

What I am saying, I do not see that being the focus of a large interest or successful result come out of this.

Senator SCHWEIKER. We did have some testimony yesterday that radar waves were used to wipe out memory in animal experiments.

Dr. GOTTLIEB. I can believe that, Senator.

I would remind you that the problem of radio waves and what it does to people is extremely current interest in connection with events in an important embassy overseas now. There is a great concern about that.

Senator SCHWEIKER. Subproject 39 involved research on 142 criminally insane individuals. Research techniques included straight interrogation, hypnosis, hypnosis in conjunction with LSD, and LSD with interrogation.

Can you shed any light on this experiment or what the purpose for getting into this area was? How successful or effective was the project?

Dr. GOTTLIEB. I have to again ask for a date on that if I can get it.

The reason I was asking for a date, there was a rather large period of time that I was not involved in this at all.

Senator SCHWEIKER. We have one. It is April 7, 1958.

Dr. GOTTLIEB. I was not in the country, not connected with LSD, had no knowledge of it.

Senator SCHWEIKER. Did you ever in your work under MK-ULTRA or other work in your division, buy "reject" drugs from pharmaceutical concerns?

I use "reject" in the trade sense, drugs would not be available on the commercial market because they could not meet the standards for some reason or another, such as having too many adverse side effects.

Dr. GOTTLIEB. Can I speculate on a misunderstanding of that term, Senator?

Senator SCHWEIKER. Certainly. Because it may be helpful.

Dr. GOTTLIEB. You may be talking about a term used for drugs which drug companies test and find have side effects which mitigate commercial exploitation, because the military had a continuing program, a very aggressive one, to pinpoint those in a sense that they had effects of interest to the military, and we did have liaison with the military and were interested. But that is what I think we are talking about "reject."

Senator SCHWEIKER. I accept your definition.

Now, were there any of these kinds of drugs used as part of your ongoing MK-ULTRA or other testing programs, and if so, for what purpose?

Dr. GOTTLIEB. An interest in them there surely was. The purpose was, in our continuing search for drugs that might have any of the effects on that list that you started to read before.

Senator SCHWEIKER. Was any of this work fruitful, to your knowledge?

Dr. GOTTLIEB. In a way, I guess that is the way LSD came to our knowledge. LSD was one of these compounds made by Sandos Pharmaceutical Co.

Because of these bizarre side effects it had, they had no commercial use for it.

Senator SCHWEIKER. Where did you get your LSD for your tests?

Dr. GOTTLIEB. I am a little hazy on exactly where. But I have got a pretty good idea. It was from one of the major U.S. pharmaceutical houses who were making drugs of a similar structure and who we interested in manufacturing LSD for us.

Senator SCHWEIKER. I want to make a clarification regarding the time period of subproject 39.

The record shows that subproject 39, dealing with criminally insane individuals and using such techniques as hypnosis, hypnosis with LSD, and LSD interrogations, actually began in 1954 and lasted through 1959, a 5-year period. The memo I referred to earlier was dated n 1958, while you were out of the country, but the project covered a much longer time frame.

And the cost was estimated at $30,000.

Dr. GOTTLIEB. I have been given a piece of paper that will give me a little bit more information about this. I will read it and try to respond.

I will just read you what we wrote:

> It is thought that these persons have the same kind of motivation for withholding certain information that is comparable to operational interrogations in the field.

That would be a clear remembrance of mine, and having been stimulated by reading this as to why we were in it.

Senator SCHWEIKER. Dr. Gottlieb, besides the safe houses that we have discussed in some depth here, where else were drugs tested on unwitting subjects? We know these tests went on in certain safe houses.

What about other places and locations, to your knowledge?

Dr. GOTTLIEB. Are you talking about with the United States?

Senator SCHWEIKER. Yes.

Dr. GOTTLIEB. I do not remember now the places where that was done, unwitting tests. We certainly, as I indicated before, did a lot of testing on ourselves.

Senator SCHWEIKER. Well, now, we had some information indicating that drugs were slipped to unwitting subjects in bars in New York City.

Dr. GOTTLIEB. I am sorry, I was in my mind putting those under the umbrella of the safe house.

I did not realize you meant specifically, physically outside——

Senator SCHWEIKER. How did you relate them to safe houses, so I understand——

Dr. GOTTLIEB. They were unwitting administrations that were made by Morgan Hall or through Morgan Hall.

I would like to say, to give the most precise answer to that that I can is that I am not specifically aware in the sense that I can remember, look, this was done in a bar.

But I have no reason to think that that was not done.

Senator SCHWEIKER. What did you do with the quantities of material that ultimately came into your possession—drugs, poisons, toxic substances—which either were produced for you or were studied by you?

For example, we heard yesterday from Dr. Geschickter that we imported a lot of poison mushrooms from Africa. What did we do with them?

Dr. GOTTLIEB. I think to answer the question precisely I did hear about the mushroom discussion, and my best remembrance of that, and I want to underline this, to answer it most accurately, would have to relate it to a particular project from where it was done, but my general remembrance of it, that was a project that was discussing some of the very basic aspects of relating a chemical and a structure to an activity. It took place in the university somewhere, I cannot remember where, and that this material was procured in connection with getting this investigation or material for him to work on.

It was not a secret or unwitting——

Senator SCHWEIKER. As a normal thing, what would you do with this kind of toxic material?

Dr. GOTTLIEB. Material like the one you are talking about would revert entirely to the investigator doing the work. He works with materials like that all the time, and different institutions do different things.

Some have a storage room, I guess they accumulate; some destroy them afterward.

Senator SCHWEIKER. As you will recall very vividly, our own Intelligence Committee looked into a case where the CIA had maintained and stored poison toxins that were supposed to have been destroyed.

I guess the responsibility for that fell somewhere between CIA and Fort Detrick, but we had good evidence that deadly shellfish toxin was not destroyed even after a Presidential order. Some of the materials from projects like MKULTRA must have come into the Agency's hands. What happened to them? Do we know they were destroyed?

Dr. GOTTLIEB. My experience is most specifically reverted to our hands; in other words, it was not appropriate to leave them with the investigator because it wasn't normal for him to have them, and also had to do his work and were kept in the laboratory for storage in the CIA.

I guess that laboratory, as I remember, this happened after I left, was inventoried and reviewed and my understanding from the testimony that came up in those hearings that you mentioned were all destroyed and that did not happen while I was there.

Senator SCHWEIKER. One point that came to light in our review of the financial records was that Morgan Hall had considered subleasing the safe house, or at least he had placed an ad to sublease the safe house.

Can you enlighten us as to what was happening here?

Dr. GOTTLIEB. I do not remember anything about that.

Senator SCHWEIKER. That was February 8, 1955. Morgan Hall wrote a check to pay for an ad he placed to sublease the safe house.

Dr. GOTTLIEB. I am sorry, Senator, I do not remember that incident and cannot throw any light on it.

Senator SCHWEIKER. I know you have a plane to make, so I'll try to conclude this.

I have only one other area of questioning today.

EA3167, the compound we discussed in our open session with the Defense Department, was tested by DOD for CIA by putting it on the skin, what does this EA3167 do to people? Can you tell us in layman's terms what effect you were looking for?

Dr. GOTTLIEB. I am repeating something I heard the other day because I have no recollection of my own, but as it was explained to me in my work with the staff here on Sunday, it is a material which, when added with other materials, makes it possible to administer something to the skin rather than orally or through the air.

That is my understanding of it.

Senator SCHWEIKER. It is more or less an administering agent, then? You are saying you would mix some other drug with it, some hallucinogen or other drug, but EA3167 itself has no particular effect?

Dr. GOTTLIEB. I want to be careful, Senator.

I do not have independent knowledge of this. I am trying to interpret that from what someone on your staff told me. That is my interpretation of it.

Senator SCHWEIKER. I guess that concludes our line of questions for you, Dr. Gottlieb.

We appreciate your being here. Thank you for coming.

[The prepared statement of Dr. Gottlieb follows:]

STATEMENT OF DR. SIDNEY GOTTLIEB

My name is Sidney Gottlieb and I reside in California. I am appearing at this hearing as I have appeared in others in the past, voluntarily and prepared to offer whatever constructive testimony made possible by my background and remembrance of things past.

I would like to first comment on project MKULTRA.

To the best of my recollection, several research inquiries -- which much later came to be organized under the Cryptonym MKULTRA -- were begun in about 1952. Their purpose was to investigate whether and how it was possible to modify an individual's behavior by covert means. The context in which this investigation was started was that of the height of the Cold War with the Korean War just winding down; with the CIA organizing its resources to liberate Eastern Europe by paramilitary means; and with the threat of Soviet aggression very real and tangible, as exemplified by the recent Berlin airlift.

In the judgment of the CIA, there was tangible evidence that both the Soviets and the Red Chinese might be using techniques of altering human behavior which were not understood by the USA and which would have implications of national survival in the context of national security concerns at that time. It was felt to be mandatory and of the utmost urgency for our intelligence organization to establish what was possible in this field on a high priority basis.

To mention just a few examples, there was a concern about the apparent manipulated conversions of Americans interned in Red China for a very short time; there was also a concern about apparently irrational remarks made by a senior American diplomat returning from the Soviet Union; perhaps most immediate and urgent in our minds was the apparent buying up of the world supply of at-that-time-little-known new phychogenic material LSD; lastly, there was a growing library of documented instances of routine use by the Soviet Security Services of covertly-adminstered drugs. This last, by the way, has grown and been added to, up to the time I left the Agency (CIA).

I accept full responsibility for my own role in these activities, in relation to what my position in the CIA implied, as to my level of responsibility as it changed over the years. At the outset in the period 1951-1957, I was head of a branch of a division charged with the responsibility of looking into the matters which I described above. I set up and handled some projects myself, and supervised and administered other CIA employees monitoring other projects. As the years went on and I assumed broader responsibilities, my personal involvement in the projects lessened. Thus, my involvement was most direct in the period 1951-1957. From 1957 to the end of 1960, I was not directly involved at all, being assigned to other matters. I was stationed overseas 1957-1959 and was assigned to another unit in headquarters in the period 1959 to the end of 1960. Late in 1960,

I returned to TSD to become Chief of the Research and Development component; in 1962, I became Deputy Chief of TSD; and from 1966 to 1973, I was Chief of TSD. I retired from the CIA on June 30, 1973. I want to stress, however, that a policy review of project MKULTRA and all of the projects I was connected with took place at least once a year during MKULTRA active period, which I remember as 1952-1965. In addition, as each project was funded, approval in writing at least two levels above mine were required in all research and development activities.

Project names like Artichoke and Bluebird have been mentioned in the press, associated with my name. My remembrance is that project Artichoke was managed by the Office of Security and that I had no direct or indirect resonsibility for it, although I became aware of its existence and general nature over the years. Project Bluebird, as I remember it, was also an Office of Security concept, possibly never actually realized, which later evolved into a TSD-sponsored activity looking into brainwashing, and ultimately included the Society for the Investigation of Human Ecology.

One unusual project started in 1952 and continued until about 1965 was an arrangement originally set up by me with the Bureau of Narcotics. In this regard, I have previously furnished my recollections of this matter during my

40 odd hours of testimony to the Senate Select Committee on Intelligence, but I am glad to discuss these matters again with this Committee. The origin of this Bureau of Narcotics activity rested in my becoming aware through reading OSS research files of an investigation into the behavior-alterating possibilities of Tetrohydrocannabinol, a synthetic material related to the naturally active constituent of marijuana. I was able to contact an officer of the Bureau of Narcotics who had participated first-hand in the OSS investigations. With him, I made an arrangement, funded by the CIA, whereby he would covertly administer chemical materials to unwitting people. The Bureau of Narcotics, through this individual, had their own interest in determining whether chemical materials could be used to elicit or validate information obtained from drug informants. The arrangement would benefit the CIA's program in that information would be obtained, unobtainable in any other way, on the effects of these materials used in situations closely resembling those in actual operations. I have no personal awareness of specific individuals to whom these materials were administered. To the best of my knowledge and remembrance, the materials administered in the great majority of cases under the Bureau of Narcotics project were LSD and Meretran. I do not have detailed information on the exact number of individuals involved, but the impression I have is that the number involved was between 20 and 50 individuals over the years of the project. I would like to add that the

Bureau of Narcotics project was the only one of its kind in the sense of trying to gain urgently needed information in the administration of materials in an operational context. Although it has drawn considerable attention in the news media, because of its unusual nature, it was a very small part of an overall program which took place in more conventional project, in the more normal setting of unversities and laboratories, as born out by the records shown to me by the Committee staff. This Committee might be interested to know that the total amount of money spent on everything related to MKULTRA was limited to 10% of the total research done by TSD. To my remembrance, at the height of the spending on MKULTRA related activities, it never even reached this percentage.

The great bulk of the research done under the general umbrella of Project MKULTRA took place in academic and other research settings. These projects almost always represented work that the individual investigators would have been doing in any case. The Agency's role was to provide the funds and, in many cases, provide access to the investigator if specific interpretation of his results in terms of our interests were needed. To my recollection, in every case, the results of the related research were published.

The degree of wittingness of the principal investigators on these projects varied depending on whether we judged his knowledge of our specific interests to be necessary in providing useful results to us. Thus, many projects were

established in which the principal investigator was fully knowledgeable of who we were and exactly what our interests in the research were. Others were simply provided funds through a covert organization and had no idea of ultimate CIA sponsorship.

The degree to which individuals others than the principal investigator needed to be witting of the Agency's connection to the research varied. It was generally left to the principal investigator to advise us as to whether anyone else in either his research team or in the administrative part of the university or research organization needed to be made witting to the Agency's relationship. To the best of my remembrance, although for general security reasons we were eager to keep this kind of information to a minimum, we went along with the principal investigator's desires and cleared and briefed whomever he felt was necessary.

The general subject of why we felt it necessary to use funding mechanisms like the Society for the Investigation of Human Ecology or the Geschickter Fund for Medical Research needs some comment. This involves the more general question of why we felt all of this research needed to be kept secret insofar as Agency sponsorship was concerned. The reason, however it may seem with the benefit of hindsight, was that we felt any potential enemies of this country would be greatly benefitted

in their own possible future aggressive acts against the USA if they were forwarned as to what the nature and progress of our research in this field was.

The largest overall picture that can be given of this group of academic and other formal research undertakings is that they were an attempt to harness the academic and research community of the United States to provide badly-needed answers to some pressing national security problems, in the shortest possible time, without alerting potential enemies to the United States Government's interest in these matters.

In all cases, research results were published through the normal overt channels for publication of medical and physiological research. I would like to remind the members of the Committee that at this point in history the amount of available reliable data on LSD and similar materials was essentially nil.

I understand from reading newspaper accounts that one of the principal interests of this Committee in this kind of research is the degree of protection that was afforded to the subjects used in those experiments where human subjects were used. As far as the Bureau of Narcotics project is concerned, my impression was there was no advance knowledge or protection of the individuals concerned. The only comment I would like to make on this is that, harsh as it may seem in retrospect, it was felt that in an issue where national survival might be concerned, such a procedure and such a risk was a reasonable one to take.

I would like again to remind the Committee that, as far as those of us who participated in this work were concerned, this country was involved in a real covert war in the sense that the cold war spilled over into intelligence activities.

Insofar as protection of individuals in the bulk of this work, as representated by formal research projects, is concerned, the matter of informed consent and protection to the volunteers participating was left to each investigator according to the standards that either he or his institution felt were appropriate to the situation. Our general feeling was that if we chose reputable and responsible investigators, appropriate standards in this area would be used. I think, in general, the procedures actually used in these experiments were representative of what was considered to be adequate safeguards at the time.

A comment should be made on the kind of interest that the Agency had in these matters and how it may have changed over the years. The original impetus for this work as mentioned above was the concern about aggressive use of behavior-altering techniques against this country by its enemies. Although this remained a continuing and probably primary focus in the history of these projects, the Agency

did become interested in the potential use of behavior modification techniques in unforeseen circumstances that might occur in the future.

It is undoubtedly true that some of these research activities were continued into the middle or late 1960's when in looking backward now the real possibility of their successful and effective use either against us or by us was very low. In fact, I remember writing a report when I was on detached assignment with another unit in the clandestine services in about 1961 which concluded that the potential effectiveness of these techniques and the inclination of American intelligence officers to use them was limited. The only reasons I can provide now for the continuance of a small number of these activities was that we felt we needed to be more certain than we were of these negative results and also that we felt a need to maintain contact with individuals knowledgeable in these fields to keep ourselves abreast of what was happening.

In conclusion, I would like to comment on three things which trouble me very much about the situation I find myself in.

First, there have been many references in the press to attempts by me to avoid testifying. These allegations are without any basis in fact, either in terms of

"hiding" or making myself unavailable to congressional committees. In the case of my testimony before the Church Committee in 1975, I voluntarily and immediately returned from India as soon as I was made aware at the Missionary Hospital, where I was performing voluntary services, that I might be needed. I have been available for all legitimate inquiries at all times through my counsel.

Second, I feel victimized and I am appalled at the CIA's policy, wherein someone or some group selectively pinpoints my name by failing to delete it from documents released under the Freedom of Information Act without any permission from me. That is, my name is selectively left on released documents where all or most others are deleted. I have a great concern for past, present and future employees of the Agency involved in sensitive, difficult, and potentially misunderstood work, as this policy of selective disclosure of individuals names gets applied to them. I am sincerely concerned that the CIA's ability to recruit clandestine assets in the future could be severely impaired.

Thirdly, my concern is for the reputations of the many individuals not employees of the Agency, in academic and professional life who, for the most partiotic and constructive

of reasons, and guaranteed both by myself and the Agency of confidentiality and non-disclosure, chose to assist the Agency in its research efforts over the past years. By now, the association in the news media of any name in the academic or professional work with CIA brings immediate and automatic negative connatations, and irreparably damages their reputations. With regard to my testimony, I hope this Committee will understand my reluctance, except when absolutely essential, to mention other names. I am desirous and willing to share any knowledge of matters of interest to the Committee that I have in my memory but, whatever the CIA's policies may be on this matter, I feel it is a point of personal responsibility to honor the commitment of confidentiality that I feel towards these individuals and not to be a party to further damage their reputations.

In summary, I would like this Committee to know that I considered all this work -- at the time it was done and in the context of circumstances that were extant in that period -- to be extremely unpleasant, extremely difficult, extremely sensitive, but above all, to be extremely urgent and important. I realize that it is difficult to reconstruct those times and that atmosphere today in this room.

Another thought that I would like to leave you with is that should the course of recent history have been slightly different from what it was, I can easily imagine a congressional

committee being extremely critical of the Agency for not having done investigations of this nature.

In any event, it is my simple wise to be as helpful as possible to this Committee in obtaining its appropriate legislative goals, and I am prepared to be as helpful and forthcoming as possible in the areas in which you are interested.

Senator Schweiker. We will continue with another witness, but we will recess first and go back into the full committee hearing room for an open session.

Thank you very much.

[Short recess.]

[The meeting reconvened in the full committee hearing room.]

Senator SCHWEIKER. At this time we will call as the health subcommittee's next witness Mr. Peter C. Bensinger, the Administrator of the Drug Enforcement Administration.

Mr. Bensinger, would you like to make a few general remarks first? Do you have a prepared statement to present before I ask you a few questions?

STATEMENT OF PETER C. BENSINGER, ADMINISTRATOR, DRUG ENFORCEMENT ADMINISTRATION, ACCOMPANIED BY JOSEPH KREUGER, ACTING CHIEF INSPECTOR, DRUG ENFORCEMENT ADMINISTRATION

Mr. BENSINGER. Thank you, Senator Schweiker.

I would like to, if I might. also introduce Joe Krueger, Acting Chief Inspector for Drug Enforcement Administration.

I have been Administrator for DEA since January 23, 1976. I might add there was no indication at the time I arrived at the Drug Enforcement Administration that any former narcotics agent of a former predecessor agency of which there have been many, had been engaged in cooperation with the CIA or anyone else in experimentation with drugs or unwilling subjects.

Needless to say, I was shocked and appalled that such activity did take place, and I can conceive of no circumstances under which such activity could be justified.

Upon determining that a former official was involved from the Federal Bureau of Narcotics in this activity. I did direct DEA's Office of Internal Security to conduct with highest priority a thorough investigation to determine the nature and scope of drug testing activities, cooperative relationships between predecessor agencies and individuals and the CIA.

The Office of Internal Security of DEA has determined with sworn and written statements from every national and regional program manager that we are not providing facilities, drugs, or funds, for unwilling testing on humans to the CIA or anyone else.

We have worked closely with the staff of this committee.

I would be happy to answer any questions, Senator.

Senator SCHWEIKER. I think you are certainly correct.

You have exhibited a very positive approach and worked very cooperatively and very closely with the subcommittee.

So I understand your answer to my basic question, which I didn't even have to ask, is you were not only surprised but shocked to learn about your agency's former involvement with CIA drug testing, and you are already taking steps to remedy it and prevent future abuses by instituting your own investigation. Is that essentially correct?

Mr. BENSINGER. That is correct, Senator Schweiker, except that the details that we have, both from committee staff and whatever records are availble to us from the CIA indicate that this type of cooperative

relationship in which facilities, safe houses, were operated in conjunction between FBN and CIA did terminate in June 1965.

Senator SCHWEIKER. The relationship apparently terminated in June 1965, and you were apprised of its existence when, roughly?

Mr. BENSINGER. I was apprised of it in September of this year that this previous 12 years ago activity did take place.

Senator SCHWEIKER. September of this year?

Mr. BENSINGER. 1977.

Senator SCHWEIKER. And it terminated in 1965, about 12 years ago. You view the sort of cooperative relationship laid out in these hearings as going against the basic drug enforcement purposes of your agency?

Mr. BENSINGER. That is correct.

Senator SCHWEIKER. I gather you are taking every precaution and safeguard to assure that relationships like this or programs like this do not happen while you are Administrator?

Mr. BENSINGER. Absolutely.

Senator SCHWEIKER. We appreciate your coming as a witness today, and we thank you for your patience in waiting until we completed our questioning of the other witnesses.

It is refreshing to see a positive, constructive attitude on the part of a Federal agency that wants to help and cooperate with us and shares the same objectives as we do on this committee with regard to human experimentation.

Thank you very much for coming here today.

Mr. BENSINGER. Thank you.

Senator SCHWEIKER. Thank you. The subcommittee will now stand adjourned.

[Whereupon, at 12:11 p.m., the subcommittee was adjourned, subject to the call of the Chair.]

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